













THE  
STETHOSCOPE:

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MONTHLY JOURNAL

OF  
*Medicine and the Collateral Sciences.*

EDITED BY

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AND

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"Attend to the state of the system and prescribe accordingly."—CHAPMAN.  
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Lith. of Ritchies & Dunnivant Richmond, Va.

Yrs truly  
Geo A Curry

THE

# STETHOSCOPE.

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THE PROPERTY AND ORGAN OF THE

## MEDICAL SOCIETY OF VIRGINIA.

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Edited by a Committee of the Society.

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VOL. V.

RICHMOND, VA., JANUARY 1855.

NO. I.

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### Liability of Young Children to Mumps.

Reply to Dr. LITTLE's Enquiries in a late Number of the Stethoscope.

Our respected friend, Dr. John P. Little of this city, enquires, through the October number of the Stethoscope, "Whether any one has observed that up to a certain time of life, very young children are not liable to be attacked by the mumps?" and says that his "impression is that a child will not receive the mumps until it has begun to cut teeth."

His reason for that belief is, that independently of the fact that he has never seen a very young infant affected by this disease, "it is impossible to salivate a child until it is about three years old; that is, when its first teeth have made their appearance." This he attributes to "a very peculiar condition of the salivary glands of the infant."

Before this period (says the doctor) the food of the child, consisting of milk, does not require either teeth with which to masticate, or an abundant saliva to soften its food.

"It is a fair inference (he continues) that before this period the salivary glands are not fully developed, or they would be acted on by mercury. And it is, I think, also a fair inference that before these glands are fully developed, that disease which is peculiar to them cannot very well make its appearance.

"My observation has been, that until children begin to cut teeth, they will not be liable to mumps.

"Can any of your readers give me information on this subject? The books are silent in regard to it."

It gives us pleasure to have it in our power to meet the enquiry of our worthy brother.

Although very young children are not so susceptible to the contagion of mumps or of most other diseases as persons in more advanced life, yet there is no doubt that they may contract this affection at a very early age.

Within the last two years a member of our own household was attacked by it when only five months old, and several months *before the appearance of the first symptoms of dentition*. Nor is this *a very uncommon occurrence*. Whether the inference which our querist draws from this analogy with regard to the want of susceptibility of infants to the salivating effects of mercurial preparations be correct or not, is altogether a matter of speculation.

We will take occasion however, to remark, that the "post hoc, propter hoc" mode of reasoning is, of all others, least to be relied on in its application to the action of medicines.

One individual supposes that because a sucking infant cannot be salivated, it is fair to infer, that the salivary glands are not fully developed, and *therefore* that "the disease which is peculiar to them cannot very well make its appearance."

Another concludes that the exemption referred to is owing to the milk with which the infant is fed, and which coming in contact with the mercury, causes a chemical change of its properties, and thereby prevents its absorption into the system; and this last individual infers that *therefore* milk diet is a preventive of salivation in adults as well as in infants.

Whether either, and if either, which of the above inferences is correct, is of course altogether conjectural. We are inclined to the belief that the exemption of very young persons from susceptibility to the constitutional effects of mercury is owing to the *more rapid elimination* of the poison from the system of infants than from that of the adult subject, than to any other cause.

We all know that there must be not only an absorption but an *accumulation of a certain amount of the poison*, before the system can be brought under its influence.

Now, if we are correct in the supposition that in infants the eliminating is carried on more rapidly and vigorously than the cumulative process, there is no difficulty in accounting for the acknowledged fact that they are much less frequently salivated than persons in more advanced age.

With regard to another conceded fact, that very young persons are not as liable to be attacked by many other diseases, we will remark only that we think we shall have fully accounted for it when we have reminded the reader *that they are less exposed to their exciting causes* than adults. A.

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### Pneumonia.

BY J. B. GARDEN, M. D., WYLLIESBURG.

The season for pneumonia has returned again; and as its treatment is a subject of deep interest and importance to both physician and planter, we have selected the minutes of several cases from our note book. We are aware they are deficient in detail as regards physical diagnostics, but hope they will prove satisfactory enough to convey a correct idea of the different stages of the disease, in which our remedies are employed, and their effect in subduing inflammation. In the slave population, disorganization of the lungs results in a large number of cases, before the master is aware of danger, and it is then too late for a rigorous antiphlogistic plan—too late most commonly for ptyalism; nor is it often we observe anything like satisfactory results from stimulating expectorant medicines, the disease in all its stages being often called a common cold; and this is the apology we receive from our patrons for deferring the advice of a physician. While it is not every case of pneumonia which can be readily relieved by antimonial medicines, we think we may resort, with some considerable degree of reliance, to other articles of the *materia medica*, which, though of less note, certainly have great powers in controlling morbid action in many pathological states of the system; and while some laud the *bellebore* as an invaluable adjuvant in the treatment of pulmonary inflammations, we unhesitatingly subscribe to the virtues of the turpeth mineral as being inferior to none. Its action appears to be harsh in many cases, it is true, but this is nothing more than we frequently observe from the administration of tartar emetic, there being few cases of pneumonia, we are called upon to treat, in which we do not use the turpeth mineral, either as an emetic or alterative.

When obstruction of the bronchial tubes occurs from copious secretion, there is no medicine which displays its powers so beautifully upon the stomach as a prompt emetic, acting as

it does also energetically upon all the secretions, especially upon those of the liver, and exerting the specific effects of mercury upon the system, frequently in the space of an hour. Here we have a twofold object in view, separate and apart from the emetic and expectorant properties of other medicines of this class. We give our patient the benefit of the specific effects of mercury, and thereby enhance the probabilities of his recovery. Beyond its emetic effects, and what we invariably observe, is a copious perspiration, dark or green and consistent discharges from the bowels, its action being limited by an enema of tinct. opii to four or five evacuations.

In epidemic pneumonia, when not contraindicated by fever of an adynamic character, it is our object in every instance to promote free vomiting, most generally with this agent or the nitrous powders, watching their effects closely, so as to counteract a tendency to watery purging, which debilitates the patient, and instead of bringing relief, always aggravates the disease. The extremities become cold, the pulse feeble, the expression of the countenance altered, and in some cases hiccough, delirium and involuntary discharges ensue. These are effects, which invariably follow a maladministration of the remedy; but as no one can tell *a priori*, what are to be the effects of remedies in any given case, all that is necessary is to watch closely at the bedside of the patient, and control their morbid action.

Turpeth mineral, in union with the vegetable substances, forms an admirable combination, adapted to a wide range of diseases, and in none exerting a more salutary effect, than in irritation of the lungs, from sympathy with the abdominal viscera.  $\mathcal{R}$ . Oxymel of squill, vinum ipecac., vinegar of seneca, aa, one ounce, clear honey  $\mathfrak{z}$  iii. To the above add 36 grs. of turpeth mineral, stirred in while hot. For an adult, the dose is 10 drops, repeated every hour, as an alterative every 15 minutes, as an expectorant, and in drachm doses, every 15 minutes as an emetic.

October 2d, 1852—John Hastin, a lad 13 years old, was taken with cough, pain in the right side, headache, slight delirium and high fever. This was the condition in which I found him on the following day; to which symptoms may be added a dry tongue, great thirst, restlessness, and pulse 150 to the minute. Prescribed the nitrous powders. Vomits after the first dose, and bears the rest with slight nausea.

October 4th—No change, except that the medicine had purged him once. Omit the powders, and gave 5 grs. of sulphate de quinine every four hours, until there was a change in the character of the pulse, and a reduction of morbid heat

of the surface. He took 15 grs. and appeared tranquil for the first time; the skin became pleasant, and the pulse reduced in force and frequency; cough no better and but little expectoration.

Oct. 5—Breathing difficult, cough dry, with cavernous respiration, eyes red and watery, tongue dry and of a brownish cast, pulse 160 and feeble, high delirium, and extremities shriveled with a clammy sweat. Put a blister on the chest, which drew well in five hours; the pulse became fuller, and less frequent. Patient answers questions, when aroused up, but falls into a low muttering delirium. We now prescribed a stimulating expectorant of muriate of ammonia, t. emetic, and liquorice, but having seen this remedy fail to promote expectoration, and sustain the patient in similar states of the system before, we determined to give him 5 grs. of the sub-sulphate of mercury, and as much powdered ipecac.—the ipecac. to be repeated every 15 minutes, until emesis commenced. In two hours the mercury had vomited freely, produced free sweating, and acted once on the bowels. By 9 o'clock at night, it had purged five times, which was checked by an enema of tinct. opium.

Oct. 6th—Had rested well through the night, expectoration free and easy, his pains had left him, intellect clear, pulse 100, skin cool, tongue moist and nearly clean, breathing regular, and complains of nothing, except the blister. The patient recovered under the use of the Brown mixture, administered occasionally, when the cough was troublesome.

Nov. 1, 1851—Phil, a negro man, æt. 21 years, had a chill, followed by pains in the head and chest, difficult respiration, 60 to the minute, cough with but little expectoration, skin hot and dry, pulse 140 to the minute, with great thirst. He was ordered one of the following powders, every half hour, until emesis took place. ℞ Calomel 8 grs., t. emetic 2 grs., ipecac. 6 grs., nitrate of potash 36 grs. Ft. 12 powders. The whole were taken without vomiting or nausea, but there being a gradual amendment in all the symptoms, he was directed to continue the powders, but lengthen the interval of giving them. "Tartar emetic often produces the happiest effects, when it produces no visible evacuation, but we are not to suppose from this, that it is producing no change in the existing morbid actions."

On the second day, the medicines acted freely on the bowels, producing copious, thin stools, while a corresponding change took place in the circulation, the pulse becoming feeble and frequent, and the extremities cold. Directed capsicum, camphor, hyd. c. creta, and g. acacia aa, 5 grs. to be given

in syrup. The skin soon became uniformly warm and moist, pulse full, discharges less frequent, very dark and more consistent. The tongue now became black, which we have always regarded as a favorable symptom in pneumonia.

The farther treatment of this case consisted in the exhibition of  $\frac{1}{8}$  gr. t. emetic, 10 grs. ext. liquorice and 4 grs. muriate of ammonia, every two hours, dissolved in one tablespoonful of water.

March 1853—Bedny has symptoms of pneumonia, with greenish yellow sputa, great dyspnœa, and a black fuliginous secretion on the teeth. This case was alarmingly prostrated in the beginning of her disease, by several large doses of calomel. The intellect was clear, but she had no control over the sphincter ani and vesical muscles. "Cathartics given in pneumonia, before the system has been prepared for their reception by the tartar emetic, in a great majority of cases produces watery purgation, an irritable stomach, increase the local determinations of blood, produce a still greater dryness of the skin and mucous membranes, makes the cough more dry and distressing, and adds greatly to the debility of the patient." Under the use of turpeth mineral in alterative doses for three or four days, when much cough, in expectorant doses, the black secretions on the gums and teeth disappeared. The tart. emetic, muriate ammo. and liquorice were then prescribed with success.

March 1853—Bill, a negro boy, æt. 7 years, has symptoms of pneumonia with delirium. Gave him one grain of tart. emetic every hour for three hours, which vomited and purged freely. Prescribed nitrous powders, one every two hours. Took twelve, but no perceptible change occurred. During the time of taking the medicine, no nausea or vomiting, pulse 160 to the minute, respiration 40, skin hot and dry.

It occurred to us to try the virtues of the veratrum viride, as the only remedy we knew of in any way calculated to meet the indications in the case, and accordingly we gave three drops of the tincture every three hours, in one teaspoonful of water. After taking five such doses, the pulse fell to 140. After the eighth dose, pulse fell to 136. The last dose vomited copiously, and purged dark secretions from the bowels. Pulse came down to 100 to the minute, and respiration to 36. Half a drop of the tinct. now vomited. It was discontinued, and the pulse arose to 140 in a few hours. Other remedies were perseveringly employed, but the patient died—the tinct. hellebore being the only remedy used which seemed to exert any control over his disease, and under its influence but a slight mitigation of symptoms.

This is the only case in which we have used Norwood's tinct. veratrum viride with any hopes of success. It is a powerful emetic, a lasting nauseant, and in its action upon the heart and arteries, is similar to the lancet.

We did use it in another case, in a forlorn stage of the disease, and merely as an experiment. To say the least of it, it may be called a dangerous medicine, and is only admissible in cases of strong, athletic subjects, if at all.

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### **Epidemic Typhoid Dysentery.**

BY THOMAS C. HINES, M. D., NANSEMOND COUNTY, VA.

Among the various diseases which flesh is heir to, few perhaps have proved more destructive to life, or more devastating in their influence, than that of dysentery. Nor has there been one of comparatively so simple a nature—the anatomical character so plain—that has tasked the skill and ingenuity of the physician to such an extent, in discovering suitable remedies for the various forms in which it makes its appearance. From the time that puppies, ducks and frogs were applied to the abdomen, and powdered glass administered internally by Marcellus Empericus, the human skull bone by Etmullerius, old cheese by Avicenna, milk with stones quenched in it by Hypocrates and Galen, up to the present scientific management of the disease—all prove that the best endeavors of writers have only shown how little we know and how much we have to learn in treating this disease. It is not my intention to go into the history of this affection, but simply to describe a peculiar epidemic form of it, which first made its appearance in the southeastern part of this state, and the adjoining portion of North Carolina in 1851.

The cases which came under my observation were in a section of country bordering on the Dismal swamp, of a low, wet and swampy nature, abounding in malaria, and subject to autumnal intermittent and remittent fevers, which, during the fall of 1852 and 1853, gave place to a malignant form of typhoid fever, which attacked whole families, and prevailed to an alarming extent.

This disease, which for violence and difficulty of remediate treatment, surpassed any form which I had ever before witnessed, commenced about the 11th of May 1851, and continued until the first of July, and indeed up to the middle of this month, but in a mild and more manageable form.

It again made its appearance in the same virulent manner in June of 1852, and continued until August. In 1853 we were nearly exempted from its ravages, and up to the present time, (August 1854,) amongst the numerous cases which have prevailed, not more than one-third have been characterized by the same peculiarity. Since the year 1827, when the bloody flux prevailed to an alarming extent, and carried off large numbers from this neighborhood, up to 1851, we have had the simplest form of the disease, readily amenable to treatment.

By reference to my diary, I find that in its commencement, the symptoms were those of simple dysentery in its usual form, commencing with general uneasiness, lassitude, want of appetite, tormina, at times diarrhœa, again constipation, soon followed by small mucous discharges tinged with blood; and anon large quantities of this fluid, varying in number from 10 to 60 or 80 per day, accompanied by most excruciating tenesmus, severe pain over the region of the colon on pressure, and fever from commencement. Tongue generally furred but moist, secretion of bile greatly diminished. The appearance of the discharges were in many cases peculiar, although in most of them they presented the usual appearance. Occasionally scybalæ would be noticed, then shreds of false membrane, and masses of coagulated matter. Again—Yellow glandular looking lumps, resembling cheese, and at times of a hard cartilaginous consistence, appearing as if the enlarged glands of the intestines had passed through ulcerated openings into the bowels, and been discharged. But the most peculiar dejections were those of a muco-gelatinous consistence, large in quantity and presenting a dark brown or black appearance, which, when held up to the light, showed an intimate admixture of blood. These were speckled, and striated throughout their substance with light and perfectly black lines and dots, causing the whole mass to resemble accurately the substance found near the shores of ponds and in stagnant pools, known as frog spawn. In many of these cases the cutaneous exhalents were remarkably active, the patient for many days being bathed in a profuse sweat, without any amelioration of symptoms. Some were complicated with intermittent and remittent fevers, whilst in others the congestive form was predominant—the patient on the third, fourth or fifth day falling into such a state of collapse as to require the most active exertions to prevent sinking. In almost every case the disease, after a few days, was combined with great debility, feebleness and frequency of pulse and great amaciation. In a few cases petechiæ and vibices were

noticed. It was in the treatment of this disease that its greatest peculiarity was exhibited. To produce natural alvine evacuations was almost impossible. In the commencement scruple doses of calomel would occasionally act on the liver, and sometimes yield one, two or three bilious evacuations, but so soon as the bowels had been moved, they would again return to the small, muco-sanguinolent discharges as before, and continue as frequent as anterior to its administration. Nor would the continuation of calomel, blue mass or any other mercurial produce the slightest effect upon the biliary organs afterwards, although the system might be brought under the influence as exhibited by the soreness of gums, etc. Indeed every fatal case which came under my observation or knowledge, treated by a physician, was under the mercurial influence. The same character and frequency of the discharges would continue, notwithstanding that blood letting, both general and local, was resorted to when admissible. Emetics, cathartics and sudorifics were used in vain. Ipecac. as an anti-dysenteric, and even opium, our magnum donum dei in this affection, seemed to have lost their virtue. The mineral astringents but aggravated the disease, and most of the vegetables of this class were useless. The acetate of lead by mouth and injection, the sulphates of zinc and copper, nitrate of silver, hop mixture, tannin, kino, ratanhia, all seemed of no avail. The sulphate of soda as a general and local modifier, as recommended by Papillaud of Brazil, proved of some advantage, but by no means to the extent which he experienced in his own practice. From blisters I derived no advantage. Fomentations, emollients, cataplasms and rubefacients to the abdomen were continued daily, and by the regular course of treatment the disease continued from three to six weeks.

During the whole period of this disease the domestic treatment of the neighborhood consisted in the free use of sweet gum tea and whisky, burnet tea with alspice and whisky, milk weed, oak, poplar and birch bark made into a tea with rum or whisky; and so far from destroying every one to whom it was administered, I know of but two cases which proved fatal, although this stimulant was given in the commencement of the disease, when fever was present and inflammatory symptoms predominated, and continued throughout the whole course of the disease; nor were they at all particular about the regulation of their diet, eating promiscuously almost anything, and in whatever quantity they desired.

Among the numerous cases thus treated, was that of an overseer whose wife I was attending at the time with the

same disease. He staggered in one day during my presence, late in the afternoon. The poor fellow had scarcely entered his room before he had to start out again, and on returning declared that he could do nothing but pass a teaspoonful of bloody slime. On examination, I now found his skin hot and dry; pulse full and frequent; tongue furred; severe pain on pressure over lower region of bowels. I proposed to administer something for his relief, but he declared he had never taken any doctor's stuff in his life; and as he had just bought and brought home with him half gallon of whisky, he preferred to try that first. I attempted to convince him of the risk of increasing the inflammation (by this treatment) to such an extent as to endanger life, but all in vain, and being willing to witness its effects, I said nothing more. The next day at 12 o'clock I visited his wife, and found that one of his neighbors had made him a pitcher of burnet tea, to which he had added a large quantity of his whiskey, and had been drinking freely. Upon enquiry, he said that his pain was greatly relieved, but the discharges were about the same. He felt better at that time (he remarked) from just having finished his dinner, which consisted of fat pork and herrings. The day after, I again saw him, when I found his discharges better looking and fewer; tongue beginning to clean itself; pulse more natural; fever less; and he complained of no pain over bowels, even on pressure. The treatment of burnet tea and whiskey had been continued, as well as the diet of fat pork and herrings. On visiting his wife the next day at 10 o'clock, I found him at the door. Well, Mr. J., how does your whisky treat you? "Why, doctor, I am right well now, but after you left yesterday I was taken again with the gripes, and had to go out about twenty times. I came to the conclusion that the treatment I had been using would not do, so I determined to increase the dose, and put twice as much whisky in my tea, and drank it twice as often. I slept all night without waking, and had no discharge until this morning, and that was quite natural and without any gripes. I am now going out to my work, as the hands can't do without me." And out he went, although it was raining quite hard at the time, and remained until night. On enquiry next day, I found that his discharges had been but two in number, and natural in appearance, nor did he have any return of the disease, but was speedily restored to perfect health; and this in despite of having drunk in three days as many quarts of common whisky, (he had finished the whole on the day of leaving the house,) and that on a diet of salt pork and herrings.

At the same time and at the distance of one mile from this family, was another, living on the margin of a mill pond, affected with the same disease, whose discharges were of the dark, copious and striated character hereinbefore mentioned. Every means which talent, skill and ingenuity could devise had been exhausted in vain, and under the regular course of treatment five of its members were speedily carried to the grave. A highly stimulating plan was adopted, and although four or five others were laboring under the same form, yet not another case proved fatal, but were all speedily restored to health.

Now, having witnessed so many cases thus treated with enormous doses of whisky, recovering in despite of the remedy, and finding that the disease generally assumed an asthenic or typhoid form, accompanied by great debility, I felt assured that stimulants and tonics judiciously administered would prove an auxiliary of great advantage in its cure. To this end then, having first moderated the febrile stage by blood letting, (when necessary,) sinapisms and emollient poultices, by removing all irritating contents from the stomach, when present, by an emetic of ipecac.; twenty grains of calomel were then administered, followed in four hours by the sulphate of soda, or what in my hands proved of far more value than any other laxative, more speedily moderating the intestinal secretions, and sooner producing natural alvine evacuations, was the following mixture: *R.* Pulv. gum acacia, sacchar alb. aa 3 ii; ol. ricini  $\frac{3}{4}$  ii; syr. rhu.  $\frac{3}{4}$  iss; ol. terebinth, 3 ii; tinct. opii 3 iss; French brandy  $\frac{3}{4}$  iii. To be thoroughly incorporated, and a tablespoonful administered every hour till two or three natural dejections were produced. It then gave place to a decoction of white oak bark, yarrow and dewberry roots, prepared by boiling in milk, as recommended and successfully used by Dr. Cogswell, in an epidemic dysentery in Washington county, New York. To this was added from half to one grain of acetate of morphia and one gill or more of the best French brandy, and drunk freely throughout the day. At night, to quiet restlessness and produce sleep, one to two grains of opium, or an equivalent dose of Dover's powder was given. Early the next morning the dysenteric mixture was again administered, followed, after one or two discharges, by the stimulating astringent, with the opiate at night. Together with this treatment, quinine was used daily to the extent of from fifteen to twenty grains, with considerable advantage; and when the intermittent or congestive form predominated, it was carried to the extent of from 40 to 60 grains in the same length of time.

This treatment was continued until the disease gave way, which it usually did in less than one half the time required by the regular practice, and although the stimulants was administered in different vehicles, and frequently in greatly increased doses, sometimes to the extent of a pint or more a day, yet I have still to witness the first case in which it proved deleterious, while in numerous instances I have seen the tormina and tenesmus cut short as if by charm, and mild cases frequently cured in one, two or three days. Up to the present time more than two hundred cases have been thus treated, of which but three have proved fatal.

REMARKS.—From the success of the foregoing treatment, we are led to enquire what is the true pathological nature of this epidemic form of dysentery? Can indeed the existence of acute mucous inflammation be its essential cause? This has been denied by many distinguished writers, even in its simple form. Recamier says, that inflammation is not primary but secondary, the result of the irritating action of the vitiated fluid on the internal membrane of the intestines. Cullen attributes the proximate cause to a preternatural constriction of the colon. Ranking remarks that inflammation once considered a cause is only one form, alteration of secretion another.

Again—if inflammation were the cause, fever should be a necessary and essential concomitant of an attack of dysentery; but that this is not the case, is abundantly proved by Sydenham, Frank, Akinside, Roll, M. Vigne, Park, Wood, &c.

I think it highly probable that the disease originally produced by the prevailing atmospheric peculiarity, the morbid cause of the epidemic typhoid fever, which immediately succeeded it, the concentrated virus of which speedily weakening the vital powers, and acting on the mucous membrane of the intestines, produces a complete relaxation of their exhalent orifices, thereby allowing the altered secretions, together with the red globules of blood themselves, (before retained,) a ready passage into the large intestines, which by their irritating properties produces spasms of the part, and leads to the tormina and tenesmus which form so striking and painful a feature in this disease.

That it was complicated to a certain extent with the typhoid fever, I feel fully convinced. The combination of simple dysentery, with intermittent, remittent and continued fevers, has been so satisfactorily demonstrated by Johnson, Park, Buel, Sir John Pringle, Morton, Willis, Morely, Grimm, Cheyne, Harty and a host of other valuable contributors to

our science, as to leave not a shadow of doubt of the complication of the dysentery with the prevailing fevers of the season.

The typhoid fever which followed this epidemic in 1851, 1852 and 1853 presented symptoms, in many respects, analogous to it. It was an epidemic characterized by great debility, emaciation, inordinate action of the bowels from the mildest laxatives, accompanied with frequent bloody discharges. Skin generally bathed in a profuse sweat. Both were of long standing. Both diseases of minus vitality, requiring for their cure the same tonics and stimulants, quinine, turpentine and brandy. Both attacked whole families, and were similarly modified by local causes, and both were considered in the neighborhood as contagious.

Among the various epidemic forms of dysentery described by authors, none approximates so nearly to this as one described by Dr. Rodgers, which occurred at the same time with an epidemic typhoid, in the city of Cork, in the year 1733. "These diseases," he says, "so kept pace with each other, that they seemed to partake of the same common cause, and were best met by the same line of treatment, viz: the most generous, warm and active cordials. All antiphlogistic and lowering remedies were found to be utterly inadmissible."

If the above views of the nature of the disease be correct, we may readily account for the success of the treatment; the quinine as an antidote, counteracting the morbid agent in the system, the laxative mixture with turpentine, altering and removing acrid secretions; tonic astringents and stimulants to restore the lost tone, and produce contraction of the intestinal exhalents; nourishing and digestible food to prevent exhaustion; and opiates to relieve pain, produce quietness and promote sleep.

### The Stethoscope.

WITH the present number commences the fifth volume of this journal, and its second since it became the property of the Medical Society of Virginia.

In tendering to our readers the congratulations of the season, it may not be out of place to recur to the design of our publication, as well as its measure and prospect of usefulness.

The collection and diffusion of medical information and the earnest presentation and advocacy of such measures as would elevate the professional standard, and maintain professional respectability, are the prime objects of this periodical.

The conductors of this journal have kept its columns ever open to the profession—designed as their organ of intercommunication—the vehicle of their contributions to medical literature—and discussions of all subjects affecting the rights and interests of medical men as a class.

In almost every issue we have solicited contributions from the pens of our readers, seeking particularly to foster and stimulate in Virginia a medical literature of our own.

To this end our efforts shall still be directed, rather than to the collection of materials, rehashed from other periodicals.

The interest and value of the journal will be necessarily dependent upon the number and character of the contributions which are forwarded to us—and we take this occasion to remind our friends, that in accepting the appointment of editors to this journal, it was by no means designed that we should be its principal contributors. It is our duty to take charge of the papers of others, and to see that they are properly arranged, and presented through our pages.

During the past year, much of our editorial space has been occupied in presenting and advocating reforms in our system of medical education. We have earnestly expressed our

long matured convictions on this subject, and in so doing, have reiterated the sentiments of Rush, and Chapman, and Jackson, and Hodge, and a host of other medical worthies.

The particular measures of reform we have advocated are those which have received the sanction of the American Medical Association and of the Medical Society of Virginia. We have warred against a faulty system, adopted in the infancy of our civilization, and still adhered to FROM MERCENARY CONSIDERATIONS, notwithstanding every intelligent and honest mind must admit its total inadequacy to the present state of medical science.

Our remarks on these subjects have been designed against no particular institution, but all institutions which have failed to come up to the requirements of the American Medical Association. Our humble meed of praise has been awarded to such as have pursued a different line of conduct. Although it may not be necessary elaborately to reargue these questions, yet we shall recur to them whenever a suitable occasion offers. This journal can afford to be independent on all subjects—and while under its present management, will never pander to the vices of our educational system, for the sake of patronage and popularity.

The present is not the proper time to go into any details as to the financial condition of the society's journal. We will only state generally, that it is as prosperous as could reasonably be expected, and that the list of subscribers has been materially increased during the past year. W.

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### Who is to Blame?

DEEDS of villainy and crime have recently been committed within our commonwealth, which have aroused a feeling of horror and indignation among our citizens, and a damning suspicion of guilt has been fixed upon an individual passing under the title of doctor. It has been asserted by some and

denied by others, that he enjoys that title by virtue of a diploma of a medical school. Be that as it may, it is sufficient for our purpose to know that he enjoys that title which is a passport to the confidence of the community, by the highest authority known in this state, her legislative enactments. For ourselves, we are not disposed to let this matter pass with a few puerile ebullitions of popular wrath, in the form of hanging and burning a stuffed figure placarded with the name of Dr. THOMPSON.

Let us look at the facts. An aged man, whose simple, devoted piety commanded the respect of even the dissipated and thoughtless, a few months since was in the enjoyment of earthly and heavenly blessings, which filled his soul with holy joy and gratitude. His home was a little paradise, from which he walked forth into a sinful world to labor in his holy calling of winning souls to the service of his Divine Master, and to which he retired to rest welcomed and soothed by loving hearts. Within this Eden was a beautiful flower reared by that father's love and watered with his tears—a daughter of intelligence, sweetness of temper and piety, around whom the old man had wreathed all his heart's affections. In that little sanctuary was also a mother's holy love, of whose purity, whose mighty power, we will not speak. Now, how terrible the scene of desolation which presents itself in this abode of beauty and holy joy. There sits, in the dark apparel of mourning, the aged wife and mother, widowed and childless, brooding over her sanctuary, now polluted by lying, seduction, blasted affections and double murder. The place where angels loved to linger has become a revel house, where foul fiends exult in their hellish triumph.

The law, established for the purpose of protecting the citizen in the enjoyment of life and property, and in the pursuit of happiness, has made inquisition for the perpetrator of these horrible outrages. A man by the name of Thompson, calling himself *doctor*, has been arrested and tried and found not guilty in the eye of the law—an eye which cannot pierce the bosom and drag to light the guilty secrets of the seducer

and murderer. But to her eye was presented the following array of facts :

That Thompson, while under a solemn promise of marriage to his victim, had, in a coarse and brutal manner, denied it to several witnesses. That he administered medicine to her in the form of pills, one of which was peculiar on account of its greater size, and in regard to which he had given special directions. That while in her ordinary state of health, in a short time after taking this pill, she was suddenly seized with symptoms which the medical witnesses testified were those usually produced by strychnine, and by no other cause, (in which opinion we entirely concur.) That the prisoner had procured a supply of strychnine some weeks previously. That after the death of his betrothed he had deported himself in the most heartless manner, and had spoken of her burial in the most revoltingly brutal language.

We pass no censure on the verdict of acquittal. It may have been according to the strictest rules of law, but we ask, WHO IS TO BLAME for these outrages, which make one shudder at their recital ?

Is it the people of Virginia ? They are ignorant, and must of necessity be so, of the qualifications of men who profess to be skilled in that most abstruse of all the natural sciences—medicine. Their legislature, elected for the express purpose of protecting them against secret fraud and open robbery—against violence and murder—has, under their authority and with their sanction, passed various laws regulating the mode by which various kinds of business shall be conducted ; and with regard to these employments, it has exercised and enforced a rigorous restriction.

Is it the medical profession ? They have formed themselves into societies, and passed laws for the protection of their honor and respectability against the ignorant and unprincipled ; but these laws are powerless against individuals who refuse to submit to them. They have petitioned the legislature to protect them and the public by the use of the same means employed by the general government for the

protection of the common soldier and sailor. Their petition has been treated with utter neglect. Occasionally, when barefaced swindlers have made their appearance in our midst, and an effort has been made to expose their ignorance and rascality, some of the citizens themselves, and even a part of the press, usually loud mouthed in their denunciations of northern imposters, and great sticklers for the protection of domestic interests, have arrayed themselves against their own citizens who were engaged in the effort, and taken sides with the foreign scoundrel. The people and the press are not guiltless in this matter.

Whose fault is it, then? It rests mainly upon the heads of the legislature of Virginia. The subject has been presented to them, and they have been too busy, forsooth, with the intrigues of party and spoils and sectional quarrels, to attend to such insignificant matters. Aye, and they will have yet more crime and blood to answer for, before they will respond to any appeal. No class of men in the community have such unrestrained intercourse with their fellow-citizens—none are so freely admitted into the privacies of domestic life—none have so much exposed to them of the secrets of their fellow-men—none have such ripe opportunities for secret villainy, as physicians—and none enjoy such almost perfect exemption from a truthful inspection into the skill with which they perform their duties.

A man may be totally ignorant of the structure of the human body—of the healthy functions of its organs—of their morbid actions and of the effects of remedies upon them. He may pass from bed to bed, allowing some to die who might have been saved, and ruthlessly destroy others—and neither his victims nor their friends are competent to judge of his malpractice. They may even decide like a learned judge, that the possession of a diploma converts quackery into skillful practice. "The grave covers all his bad jobs."

If the lawyer be ignorant and conducts his case unskillfully, his acts are to a great extent publicly performed, and his incompetence is soon publicly exposed. If, then, the practice

of the law be restrained by strict and wholesome laws—if the possession of the diploma of a law school be no more than an honorary testimonial in the eye of the law—not exempting the candidate from a strict examination before a competent board—much more should the private sanctuaries of our citizens be zealously guarded against the seducer and murderer, who would enter to pollute and devastate under the guise of a physician.

The various religious societies guard their sanctuaries against the ignorant and vicious with a jealous watchfulness that leaves no room for legislative interference, and the least departure from rectitude is punished with censure or degradation. But even the ministry have not the opportunities for secret crime daily enjoyed by the medical profession.

All these things are well known, and yet the ignoramus and the villain can buy the title and privileges of the profession for the paltry sum of five dollars paid into the state treasury. The legislature denounces Yankeeism, and yet they out-yankee the Yankees themselves, by selling the privilege of swindling her citizens, to northern quacks and quack-pedlars, whose ignorance and crimes may have compelled them to escape from an indignant community at home.

But some one asks, Would such a board as you propose have excluded Thompson? Certainly it would. The disgusting ignorance of his own language, as shown in his correspondence, by the commission of gross grammatical errors, would have been sufficient evidence in itself of his incompetency. Such a board would never trust the important requisition of preliminary instruction to the evidence furnished by a grammatical essay carefully prepared during several months previously to its presentation, and *carefully revised and corrected* by a friend, after due notice given that inattention to the rules of grammar will insure its rejection, together with that of its author.

Let the people look to it, for other and (if possible) more fearful crimes are in preparation for them. All the most deadly poisons have been extracted by the aid of science, and

prepared in such forms that the exceedingly minute quantities are sufficient to perform the work of death. So subtle are they, that in many instances their detection will under the circumstances be impossible. Criminals will escape, and villainy may riot in the land. Let the horrible crimes already committed be a sufficient warning. Let them beware into whose hands they commit, by sanction of law, the administration of these deadly poisons. Let them not be deluded by the demagogue, who will tell them that to restrain the ignorant and unprincipled is "an infringement of a Briton's freedom."

B.

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**Dr. Carter P. Johnson.\***

It is now three months since the wreck of the ill-fated Arctic. Upon the announcement of that awful calamity, the tears and sorrows of our own community were mingled with those of distant towns and cities of the Union. A darkness of gloom, as a funeral pall, overspread the land, and one universal lament sounded the mournful requiem of the dead. That "dies iræ" of a nation's grief has swelled its fullest note, and died away in retreating echoes. To him who leans from above with more than human sympathy for human sorrow, there is yet a cry of anguish unheard by mortal ears, the plaintive "miserere" that goes up from the silent chamber of bereavement. May the divine comforter be there.

The subject of this notice, Dr. CARTER P. JOHNSON, was one of the passengers of the Arctic.

We have delayed thus long the execution of the mournful task before us, from a lingering hope that our fears as to his unhappy fate might have proved fallacious.

Painful certainty has now succeeded to gloomy apprehension, and a whole community mourns the loss of one of its brightest ornaments.

Dr. Johnson was a native of this place, and here received his early education. His boyhood and youth were marked by the characteristics of his after life: gentleness of disposition, amiability, a noble rectitude of purpose, and a degree of application rarely exhibited at so early a period of life. The

\* Dr. J. was president of the Medical Society of Virginia at the time of his death.

routine of school exercises were passed by him with unusual credit.

At eighteen he entered the University of Virginia, where his brilliant success fully realized the expectations of his friends. With an ambition to attain the highest honors, he toiled in pursuit of his object with an intensity of application that excited the wonder of his contemporaries. At the end of *two* sessions, a distinction rarely attained, he was awarded the degree of master of arts.

The autumn following his return from the university, he entered upon the study of medicine, attending lectures at the Hampden Sidney Medical College.

At the close of the second session, he received his diploma, and entered at once upon the practice of his profession.

Soon after, he was appointed demonstrator of anatomy in the same institution, and subsequently professor of anatomy and physiology. This chair he ably filled until his death.

As a former pupil of Dr. Johnson, we venture, with diffidence, a few remarks in tribute to his memory. And it is with feelings of veneration and respect, nearly akin to affection, that we enter upon the grateful task.

In our days the language of panegyric is vulgarized and become the senseless jargon of indiscriminate praise. When truth is praise, it is the highest eulogy. We do not think that nature had bestowed upon him her choicest gifts—those brilliant endowments, by which men challenge the admiration of their contemporaries, and make themselves a space in the world's eye. But she endued him with qualities almost as rare and far more useful, and taught him to value them as such. It was as a teacher that those qualities shone conspicuous. His style was manly, dignified and unadorned but by a graceful simplicity.

Patient in investigation and minute in research, he had powers of generalization which made him eminently instructive. His was not a mind to be misled by the false glitter of a merely plausible theory, nor to bow with abject deference to any set of men or opinions.

He borrowed no darling fallacies, to advocate with fierce exclusiveness—that vulgar art of little men, who ape originality. To have the guidance of others he seemed to regard as a most sacred trust and a mighty responsibility.

The student who listened to his instructions could not but feel assured that he had heard the honest convictions of an honest mind. In this, to those who knew him, there was no secret—he bore about him a talisman, the absorbing aspiration of his life—the love of truth.

When we come to speak of the qualities of his heart and of his character as a man, we feel that language cannot do justice to his memory.

Hardly without tears can we indulge the remembrance of virtues which adorned a character almost without a blemish. The gentleman, the scholar, the christian! It is such men who recognize the elevated aims of our profession, and who exercise their calling not alone to promote the selfish purposes of worldly aggrandizement, but as a potent instrument of good to humanity.

In the death of Dr. Johnson, the Medical College of Virginia has suffered a loss not easily repaired—whilst a general sense of bereavement throughout a large community bears testimony to his professional and private worth. We know that such feelings are not lasting—and wisely is it so ordained.

Even those who were indebted to his skill, or were the recipients of his unostentatious charities, will ere long cease perhaps to remember their benefactor. It matters not. “The good that men do lives after them.” And though their deeds be noted in perishable tablets here, still there is a record kept on high, and there “their works do follow them.” D.

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### Bibliographical Notices.

We have received from the publishers, B. Keith & Co. of New York, a work published by the authority of the American Chemical Institute, entitled *Positive Medical Agents*, being a treatise on the new alkaloid, resinoid and concentrated preparations of indigenous and foreign medical plants. This work contains the most complete arrangement, collection and history of the active principles of medicinal plants, which we have seen. The work is in three parts. The first is devoted to general considerations. The modifications produced by age, sex, temperament, climate, habits, &c. &c. &c. How medicines act, profusion of medical agents, uncertainty of crude articles, and certainty of concentrated principles, &c. &c. &c. The second part is devoted to concentrated preparations, and the third to clinic reports—cases of disease in which these various principles have been given.

The work is beautifully gotten up. It is on good white, gilt edged paper; the printing, large type and clear. We would advise all who are not posted up on all the new vegetable preparations, to procure this work.

Dr. MEIGS' work on Childbed Fevers has been forwarded to this journal by the publishers, through Geo. M. West, one of our booksellers. In the December No. of the *Stethoscope*, we noticed this volume, and it is therefore needless to reiterate what has already been said.

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The third edition of the same author's work upon Woman—her Diseases and Remedies—has been received, through Mr. A. Morris. The epistolary form of writing has been adopted, and in a volume of 666 pages, very many subjects, as may readily be supposed, have been discussed. To enumerate them all, and to cite the author's opinions, would far transcend our limits. We shall content ourselves by saying, that much valuable information is to be derived from its pages.

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From the publishers, by the hands of Mr. Geo. M. West, we have been put in possession of a small volume, devoted to the subject of ulceration of the os uteri. The work is by CHARLES WEST, M. D., Fellow of the Royal College of Physicians, &c., and is entitled "An Inquiry into the Pathological importance of Ulceration of the Os Uteri, being the Croonian Lectures for the year 1854." These lectures are three in number.

After examining the subject with great minuteness, the author tells us that the results at which he arrived "may be best summed up under the five following heads; and the order in which they are enumerated nearly corresponds with that in which the facts whence they are deduced were successively brought under our notice." These results we quote in the author's words:

"1st. Uterine pain, menstrual disorder, and leucorrhœal discharges—the symptoms ordinarily attributed to ulceration of the os uteri—are met with independently of that condition almost as often as in connection with it.

"2d. These symptoms are observed in both classes of cases, with a vastly preponderating frequency at the time of the greatest vigor of the sexual functions, and no cause has so great a share in their production as the different incidents connected with the active exercise of the reproductive powers. But it does not appear that ulceration of the os uteri exerts any special influence, either in causing sterility or in inducing abortion.

"3d. While the symptoms are identical in character in the two classes of cases, they seem to present a slightly increased degree of intensity in those cases in which ulceration of the os uteri existed.

"4th. In as far as could be ascertained by careful examination, four-fifths of the cases of either class presented appreciable changes in the condition of the uterus—such as misplacement, enlargement, and hardening of its tissue—while frequently several of these conditions coexisted. An indurated or hypertrophied state of the cervix uteri was, however, more frequent in connection with ulceration of the os uteri than independently of that condition.

"5th. The inference, however, to which the last mentioned fact would seem to lead, as to the existence of some necessary relation, such as that of cause and effect, between ulceration of the os uteri and induration of its cervix, is in a great measure negatived by two circumstances: 1st. The number of instances in which an indurated cervix coexisted with a healthy os uteri. 2d. The fact, that while induration of the cervix was present in 25 out of 46 cases in which the ulceration of the os was very slight, it was altogether absent in 9 out of 16 cases in which the ulceration was noted as having been very extensive."

If our author is entirely correct in his observations, it must lead us to the conclusion, that ulceration of the os uteri is no longer to be regarded as the general cause of those symptoms, which have been within late years so largely attributed to it, or even, to use his own words, "as a general concomitant of them, and index of their degree and severity."

A portion of his third lecture is devoted to what he believes to be the frequent causes of uterine disorders; causes of a constitutional character. Among the constitutional diseases upon which depend uterine ailments, he enumerates hepatic disorder, chlorosis, granular disease of the kidneys and a gouty or rheumatic diathesis.

We have given but a faint outline of Dr. West's views and opinions. For a full illustration of the subject, we must refer our readers to the work itself. H.

*A Practical Treatise on Foreign Bodies in the Air Passages—*  
by S. D. GROSS, M. D., *Professor of Surgery in the Uni-*  
*versity of Louisville, &c. &c. Philadelphia: Blanchard &*  
*Lea. 1854. 468 p. 8vo.*

The work before us is a compilation exhibiting a great deal of care and research. The matter is well digested, and the conclusions furnish sound rules of practice.

The first chapter contains an amusing catalogue of curiosities, derived from the animal, vegetable and mineral kingdoms, viz: various articles of food, leeches, flies, teeth, &c. the various grains, nutshells, a fiddle peg, &c., buttons, pins, shot, beads, nails, &c.; “and as if to cap the climax and throw into the shade all other examples, an instance recently happened at Königsburg, Germany, in which the larynx of a goose was impacted in the larynx of a boy twelve years of age.”

The remarkable fact is noticed that foreign bodies have a greater tendency to pass into the right bronchial tube than into the left. “The true cause, undoubtedly, is the peculiar position and arrangement of the *septum* at the root of the trachea, indicating the line of junction of the two bronchial tubes. This septum, spur, or ridge, to which, from its situation, the term bronchial may be appropriately applied, is not, as will be seen hereafter, in the mesian plane, but decidedly to the left of it, as may be shown by a perpendicular line extending from the centre of the rima of the glottis to the corresponding point of the inferior extremity of the windpipe, properly so called. Hence a body, especially one of considerable bulk, after having passed the larynx, will be very likely, by striking this septum, as it will be apt to do in its descent, to be pushed over towards the right side, its entrance into the corresponding tube being still further favored by the greater diameter of this tube. The probability, indeed, is that both these circumstances co-operate in promoting this result, so interesting and important both in a diagnostic and practical point of view. Mr. Goodall, of Dublin, appears to be entitled to the credit of having first called the attention of the profession to the part played by this septum in directing the passage of foreign substances in their descent towards the lungs. The observation is unquestionably one of great value.”

The larynx with its contracted orifice, extremely sensitive lining, its movable parts and numerous muscles, acts as a very efficient *pylorus* to the air tubes beyond.

If the foreign body be arrested in this part of the air pas-

sages, it will produce more alarming symptoms than if it had passed into the trachea or a bronchial tube. In the former case, there will usually be symptoms of impending suffocation, demanding instant relief: in the latter the patient may suffer very little inconvenience for days, months or even years. But it will not do to trust exclusively to this method of diagnosis, for "small as the ventricles of Morgagni are, even in the adult, they often intercept bodies of comparatively large bulk; and not a few instances are recorded where substances, of various dimensions, configuration, and composition, were retained in their interior for months and even years with little inconvenience and suffering."

We now pass on to the important subject of treatment. The author gives a table of forty-nine "cases of spontaneous expulsion followed by recovery." It is enough, however, to witness the distress usually produced by the accident, and to learn its fatality, to deter any one from trusting exclusively to the *vis medicatrix naturæ*. The medical treatment is discussed, viz: the use of emetics, sternutatories and inhalation of iodine, and are shown to be hazardous means of reliance. An instance of the successful use of iodine inhalation is related, and the author remarks, "Considering the prompt and happy effects which it exerted in that instance, it is surprising that it has not attracted more attention. It should certainly not be relied upon, perhaps not even employed, in recent cases; but I can perceive no objection why the remedy might not be tried in the chronic form of the accident."

Antiphlogistic remedies may be necessary to protect the lungs against the serious consequences of the irritation not only of the portion of the air passages in which the body is lodged, but the extension of disease throughout these organs. The author makes some highly judicious remarks in regard to "inversion of the body in order to promote expulsion of the foreign substance, and shows the importance of making a preliminary opening in the trachea."

This leads to the most important part of the volume, the consideration of the surgical treatment in regard to which the author justly observes, "A careful examination of the facts which are comprised in this treatise, will, I think, serve to satisfy any one, however prejudiced or skeptical, that the only real safety of a person, laboring under a foreign body in the air passages, consists in bronchotomy."

As a complete work of reference and sound guide to the practitioner, we commend the work to our brethren. B.

*The Modern Treatment of Syphilitic Diseases, both primary and secondary, comprising the treatment of constitutional and confirmed Syphilis, by a safe and successful method; with numerous cases, formula and clinical observations—*by LANGSTON PARKER, Surgeon to the Queen's Hospital, Birmingham, from the third and entirely rewritten London edition. Philadelphia: Blanchard & Lea. 1854. 316 p. 8vo. From the publishers, through A. Morris, Richmond, Va.

This work comprises the results of the author's observations during a period of nearly twenty years devoted to the therapeutics of syphilis, more especially in its secondary and constitutional forms. The author has moreover already presented his views on this subject to the public on more than one occasion. We have reason, therefore, to expect the present to be a work of more than ordinary value. We proceed to call our readers' attention to such points as we may regard most worthy of notice. The first chapter is devoted to the consideration of the simple or nonmercurial method of treatment, and contains a notice of the "*cura famis*" of Sweden and Norway. In regard to the reliance to which this method is entitled, the author's views are embodied in the following paragraphs:

"The nonmercurial, simple or physiological treatment of syphilis, then consists in the employment of the means already passed in review, both local and constitutional, without having recourse to mercury as a specific therapeutic agent in their cure, and this may be adopted both in the primary and secondary forms of disease. It will be found, however, that the primary are very much more easily cured than the secondary upon such a plan. It cannot be concealed, that the nonmercurial treatment does not always succeed in the cure of primary syphilis; and that in a great number of cases the cures are more apparent than real, the sores breaking out again when the patients return to their customary diet and occupations. Matters go on very well whilst a patient is limited to a rigid diet, and confined to bed, and watched in the wards of a hospital, but in private practice this cannot be done; and hence it has been found by military surgeons, that whilst they could cure the privates, they could not cure the officers on the nonmercurial plan. In the French memoirs of military surgery, the medical officers of the military hospital of Toulon state that, although the nonmercurial plan is useful in allaying the irritation, or inflammatory symptoms which accompany primary venereal sores, yet they were compelled

to resort to mercury to obtain radical cures. Fifty-two surgeons met at Nantes in July 1835, to discuss this question: they had five discussions; two only, one of whom was M. Devergie, declared themselves in favor of the physiological or nonmercurial treatment of syphilis.

"As a general rule or principle, I never employ mercury except as an aperient, in the ordinary forms or earlier stages of primary venereal sores, except such sores have been tested by inoculation, and yielded a characteristic pustule. The immediate local or specific effect of the syphilitic virus produces a degree of irritation or inflammation on the parts to which it is applied, during the continuance of which mercury is, to say the least, injurious, except as an aperient; and it is not till rest, low diet, mild opiate or astringent washes, and the other remedies just noticed have failed in producing a cure, that mercury is to be thought of as a specific agent. When, however, all these have failed, and the case has assumed a perfectly chronic character, mercury may be used with every prospect of a beneficial result, and this is certainly the result of modern experience on this subject."

The second chapter, devoted to the mercurial plan of treatment, is full of sound practical instruction. The author greatly prefers inunction to the internal administration of mercury, and supports this opinion by the high authority of Brodie, who uses the following strong language: "You may patch up the disease, by giving the remedy internally, but it will return over and over again."\*

But of the various methods of administration, the author prefers that by fumigation, and "when combined with the internal administration of very small doses of this remedy, this is by far the least hurtful and most certain way of employing mercury that can be adopted."

"In a great number of primary diseases I prefer the treatment by fumigation, combined with the internal administration of a twentieth of a grain dose of the bichloride or biniodide, and a milk diet. In indurated chancre and primary phagedenic sores, the treatment does not fail, neither is it attended with accidents, such as diarrhoea or salivation, once in a hundred times; it is as certain and as little hurtful as any treatment can possibly be.

"Between the years 1846 and 1850 I personally treated fifty-eight cases of indurated chancre in this way; none of the patients were confined by the treatment, though I admit this would have been better could it have been accomplished,

\* This certainly does not correspond with our more limited experience.

but in a great majority of syphilitic cases this is impossible; it is therefore our duty to frame some treatment that will be efficacious without such an important auxiliary. Diet can be observed, but rest in bed or confinement to a warm room cannot with a great mass of private patients. One case only out of the fifty-eight, up to the present period, has been followed by secondary symptoms."

✓ In regard to the identity of the poisons of syphilis and gonorrhœa, the author agrees with Ricord, that "the pus of gonorrhœa tested by inoculation may be followed by inflammation, but never produces a specific sore." Vidal, we have recently had occasion to state, labors to prove the contrary, but, as we think, without success.

The author discusses the contagiousness of secondary syphilis, and decides the question in the affirmative, and, we think, rightly. For the capacity of propagation by inoculation is one thing, and contagiousness under favorable circumstances is quite another. Scarlatina and measles may be rarely capable of propagation by inoculation, and yet under favorable circumstances they may be communicable by contagion. M. Cazenave, whilst admitting the rarity of the contagion of secondary symptoms of syphilis, says that it is impossible to deny its occurrence. Hence, the vital importance of guarding against the contamination liable to occur in the intercourse between husband and wife, child and nurse.

The following remark is important, on account of its bearing on legal medicine: "If the husband communicate a primary disease to the wife, and the primary disease in both be followed by secondary symptoms, it amounts almost to a certainty that the symptoms which accompany the constitutional taint will differ in each; but where secondary diseases are communicated, they are generally, as far as the skin is concerned, alike, as the two cases detailed sufficiently prove, and as Dr. Wallace had already remarked, that *all forms of syphilis produce their like.*"

We commend the good judgment of the publishers in permitting the author to speak for himself, and hope they will hereafter adopt this rule with some strictness. When we purchase a copy of a standard foreign author, we do not wish to be compelled to purchase a bulky appendage of some American editor. We would suggest to them the reprint of the last edition of *Stokes' Practice*, without note or comment. B.

*The Transactions of the American Medical Association instituted 1847. Vol. VII. New York: Charles B. Norton. 1854. 668 p. 8vo.*

The New York committee of publication deserve much praise for the promptness with which they have issued this volume. That of 1853 was not received until a few weeks before the meeting of the association at St. Louis. We admit the former volume to have been of larger dimensions and to have contained many elegant and costly plates, but after making all due allowance for these differences, we think there was censurable delay in its appearance. The present volume is well gotten up, and is issued in muslin binding. We highly commend the example of the committee in this last respect to all future committees.

The contents of the volume before us are not so varied nor so extensive as those of its immediate predecessors, yet we think there has been no falling off in regard to their interest and value. The report of the committee on education we have already placed before our readers in our last issue, and urged it upon their serious attention.

The reports on epidemics are voluminous and highly creditable to their respective authors.

The prize essay on a new method of treating ununited fractures and certain deformities of the osseous system is a very complete monograph on these subjects. The author's peculiar method consists of subcutaneous perforation of the bones for the purpose of exciting the reparative process or placing them in a condition favorable for this process.

Our limits forbid a more extended notice of the volume before us, but we take the opportunity of expressing the opinion that it is the duty of every member of the profession to possess a complete series of the volumes issued by the association. To those who have neglected this duty heretofore, we urge the obligation to commence now with this volume at least. B.

### A Female Medical College at Richmond, Va.!

Our city readers will be not a little surprised at the following announcement, which we copy from the Montreal Medical Chronicle :

"The corner stone of a Female Medical College to cost \$ 125,000, has been laid at Richmond, Va."

Now we respectfully inform our Canadian confrere, that here in the "*States*" we have a line corresponding nearly with the Potomac, called Mason's & Dixon's line, and that a great variety of tom-fooleries, such as mesmerism, spirit-rappings, Canadian annexation schemes, women's rights conventions, female medical colleges, &c. prevail extensively north of this line, diminishing in intensity as they approach it ; but that the warm genial climate and slavery of the states south of this line appear to be almost as unfavorable to them as the soil of the Emerald Isle is to physical reptiles.

We presume the announcement in question refers to the Baptist Female Seminary of this city, one of the most elegant buildings for the purpose in this country. Probably the institution was termed in our papers a female *college*, from a little affectation not unusual in these days of women's rights.

By the way, from this announcement appearing in December, several months after the completion of the building, together with another notice to the effect that yellow fever is still prevailing in many of the southern cities of the United States, we are disposed to think our neighbor in possession of the far-famed Munchausen trumpet, which, when warmed, used to give forth notes which had been frozen for months in its brazen throat. We expect our neighbor to return us some of our Christmas news some time next summer. B.

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### Iodine Injections in Leucorrhœa.

BY DR. RUSSELL.

It is not my design, in this communication, to enter into any theoretical enquiries respecting the nature of leucorrhœa, or the *modus operandi* of the remedy I propose for its cure ; my object being simply to give the results of my experience in relation to iodine as a remedial agent in this obstinate, and in many cases intractable disease ; and in doing which I shall

record facts, well assured that one well attested fact contributes more to the advancement of the science of medicine than three-fourths of the theories to which the press has ever given publicity.

I consider this disease to consist in inflammation of the vagina or the internal cavity of the uterus, or of both; and in the majority of those cases which have continued for a number of years, and resisted the ordinary modes of treatment, ulceration to a greater or less extent will generally be found to exist. For this condition, I have found no remedy equal to iodine; and, in illustration of its effects in my hands, I will briefly detail several cases from a number that have come under my observation.

CASE I.—In July 1848, I was requested by Mr. W—— to visit Grace, a favorite mulatto servant, aged forty-eight years, who, he informed me, had leucorrhœa of twelve years' standing, had been under the care of a number of physicians during this period, and had been subjected to a great variety of treatment, but without avail. I found her confined to bed, very much debilitated and emaciated, face cadaverous, pulse quick and feeble, skin cool, urine scanty, severe pains in the lumbar and pelvic regions, and œdema of the lower extremities. The vaginal discharge, often escaping by gushes, was excessive, and her general health had become seriously involved from the effects of this long-continued drain to the constitution. Upon examination per vaginam, the vagina, os, and cervix uteri were found to be in a sub-inflamed condition, and denuded of epithelium. The os was partially everted, and when deprived of its adherent mucus presented a vermilion color. The external cervix was enlarged, indurated and ulcerated. The body of the uterus was sensibly enlarged, and descended within two inches of the os externum. The secretions from these several parts varied essentially in character, and when discharged externally resembled somewhat, in quantity, consistence and color, the yolk of an egg intermixed with purulent and sanguinolent matter, and all blended in a thick, opaque, tenacious plasma.

Ascertaining that she had never used iodine in any form, and believing it would afford her relief, I ordered the aqueous solution of the following strength to be thrown upon the vagina twice daily, and retained several minutes, the parts being previously well syringed with warm water and Castile soap, and the patient placed in a horizontal position, with the hips elevated: *R.* Iodini, gr. i; potass. iodid., gr. ii; aquæ pluvialis,  $\mathfrak{z}$ i. M. As this solution ceased to create any sensation of warmth or excitement in the parts, it was gradually in-

creased to treble its strength. The muriated tincture of iron, in the proportion of twenty drops three times daily, was given as a tonic.

Under this treatment, with a nourishing diet, she soon began to improve; the irritated condition of the parts gradually subsided, the muco-purulent discharges by degrees ceased, the cervical ulcers regularly healed, and at the end of three months from its commencement she had regained her health and strength to such an extent as to enable her to resume her occupation as cook to the family. I may add, that her mam-mæ, which was very small and flaccid, became full and enlarged while under the influence of this medicine, and for several weeks secreted rather copiously a brownish watery fluid. This secretion being tested with starch, produced the characteristic blue color, showing that the iodine was absorbed.

CASE II.—August 1848. Mrs. W—— consulted me; she was aged nineteen years; small and delicate figure; had been married four years, and dates the commencement of her present “weakness” to an abortion which occurred about six months subsequent to her marriage. Prior to marriage was remarkably healthy and active. At the time I saw her, she was anemic and emaciated, countenance chlorotic, eyes sunken, pulse feeble, menstruation painful, and either scanty or profuse. The vaginal discharge was constant and copious, muco-purulent, slightly streaked with blood, and very offensive. An examination, with the speculum, revealed an irritated condition of the vagina, with relaxation and loss of its natural rugæ, and accompanied by a partial displacement of the uterus. The cervix was enlarged and indurated, with several ulcers upon its external surface. She had never submitted to medical advice, contenting herself with the use of some simple domestic remedies. Correcting the torpid condition of her liver by means of the usual remedies, I prescribed the aqueous solution of iodine and the muriated tincture of iron, as above, recommending a nourishing diet, with free exercise in the open air.

She gradually improved under this plan of treatment, and in a few months her general health was re-established. She has, I understand, continued well ever since.

CASE III.—October 1850. Mrs. G——, aged about twenty-seven years, large frame, mixed temperament, five years married, but has never been pregnant. Says that she was never “sick” previous to marriage, but subsequent thereto has always been in “delicate health.” Has enlargement and induration of the liver and spleen, sequelæ of the

intermittent fever, menstruation irregular and profuse. She was sallow and exsanguined, and exhibited, in a great degree, that long train of symptoms consequent upon an obstinate and protracted leucorrhœa. The vaginal discharge was constant, but variable in quantity and quality. Occasionally it was thin and acrimonious, often viscid and scanty, but usually purulent or muco-purulent and excessive. The cervix was soft and tender to the touch, and when seen by the speculum, was found enlarged and presenting a dark greyish appearance. The os was patulous, with tumefied edges, and of a reddish tint. A slight abrasion was found on the posterior lip.

Astringent vaginal injections—as the *nitras argenti*, *acetas plumbi*, &c.—were advised, and to relieve the enlarged and indurated condition of the liver and spleen, I prescribed the following: *R. Prot. iod. mer.*, scrupulus i; *pulv. aloes*, scrupulus iss; *ext. hyoseyami*,  $\frac{3}{4}$  i. *M. Div. in pilulæ xxiv.* One pill to be taken every night; at the same time five drops of nitro-muriatic acid in a wineglassful of the infusion of gential, three times daily was administered.

Under this treatment, the visceral derangements totally disappeared in about eight weeks, and her general health was greatly restored.

The leucorrhœa still continuing, (no benefit having resulted from the use of astringent injections,) and no amelioration in the condition of the parts being found on a second vaginal examination, which was now made, I ordered the aqueous solution of iodine and the muriated tincture of iron as above recommended. In six weeks after using these remedies, she declared herself well; shortly afterwards became pregnant, and was in time delivered of a fine healthy child.

Other cases could be adduced to prove the remedial powers of iodine as a local remedy in leucorrhœa, but as they are somewhat similar to the above in all essential particulars, it is unnecessary to introduce them here. Regarding the disease as being essentially a local one, our mode of treatment is principally local, and applied by means of a proper syringe to the parts affected. The preparation should at first be made weak, and gradually strengthened as the parts become accustomed to its application. The mildest preparation is frequently disagreeable, and sometimes painful, but these sensations are only momentary.

We have used it varying in strength from one to four grains of iodine with double the quantity of the iodide of potash to an ounce of water. It may be applied once or twice a day, or once every second or third day, as occasion may require.

In some of the severer forms of this complaint, attended with considerable abrasion and ulceration, the diluted tincture may be used with great advantage.

Its curative powers are far greater than the nitrate of silver—which, in our hands, often seemed to exasperate the complaint—or any other remedy with which we are acquainted.—*Charleston Med. Jour. and Review.*

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### Synopsis of M. Robin's Lecture on Elements of Cancer.

BY G. S. VANCE, M. D.

In order to facilitate the proper description of these elements, M. Robin divides them into six general classes, such as free nuclei, the type, the caudated, the fusiform, the concentric cells, and the amorphous matter; giving of each a full and detailed account, and then describing their union into one mass, forming what he terms the cancer tissue. It is highly important to become perfectly familiar with these various forms of the cells, for although in tumors of this kind, all may be seen, yet one or the other will always be found predominating, thus influencing the shape and consistence of the whole mass. In squirrhous growths, we find the caudated and fusiform cells, and in the encephaloid, the type cells and free nuclei; the latter often composing the whole tumor, mixed with but few of the other elements.

The *nucleus* is round or oval, its outlines sharp and well defined, showing it to have considerable thickness; in size it varies from fourteen one-thousandths to sixteen one-thousandths of a millimetre. These may be considered as the ordinary limits, but at times some may be seen as large as three one-hundredths, or only one one-hundredths of a millimetre. We see from this, that the diameter of even the smallest, is larger than that of the nuclei of normal cells; a fact which lends us material aid in forming our diagnosis. Water has no action upon them, and acetic acid pales but does not dissolve the substances of which they are composed. This behavior in the presence of reagents also comes to our help, for all other nuclei are made darker and their edges sharper by this acid. When studied with the ordinary microscope, by light reflected from a mirror underneath, they present a clear transparent and slightly blueish appearance. Within the nucleus is often seen a round bright body about two one-thou-

sandths or three one-thousandths of a millimetre in size, having somewhat the color and other characters of a fat or oil globule. This is the nucleolus. Generally there is but one to each nucleus, but it is by no means rare to find two or even three together. In some tumors these nucleoli have been found as large as the five one-thousandths of a millimetre, and having within them molecules of considerable size, called by some authors secondary nucleoli. The nucleolus itself undergoes no change in the presence of acetic acid. This body is not found in all cancerous nuclei, but when it does exist, from its large size and other characters, it gives an appearance to that body at once peculiar and pathognomonic. Between the nucleolus and the circumference of the nucleus, a large number of granules may exist. The presence or absence of this body within the nucleus is not characteristic of any peculiar cancer. A tumor of any organ will at one time have the nucleus and its nucleoli fully developed; and at another, without apparent cause the latter body will be wanting.

This description of the nucleus is equally applicable to it when existing in the cell mass, or simply lying in the amorphous matter, being what is then called a free nucleus. In every point this pathological element differs from those of the healthy tissue in size, in color, and in its reactions. Cancers composed of free nuclei with but few of the cells, are generally found in the testicle, liver, etc.

*Type Cell.*—This body is from two one-hundredths to three one-hundredths, or even eight one-hundredths of a millimetre in size, but the first two numbers may be considered as the general limits. When we compare with these the dimensions we have already given of the nucleus, we see that the relative size is much greater than is ever found elsewhere. Should we find a cell as large as the eight one hundredths of a millimetre, this very extravagance of development will itself at once prove it to be of cancerous origin. When perfect, the type cell is round with regular edges, etc.; but as it is generally found broken, either by us in preparing the specimen for examination, or by the softening of the tumor, we seldom see it as described. The forms we observe are, as it were, oscillations around this type form, retaining some of the characters, and wanting others. The cell mass, in the majority of cases, is solid, with the nuclei embedded in it. Sometimes, however, a cavity may really exist, and in which the nucleus is seen. Acetic acid has the same action upon the cell as described when speaking of the nucleus, making them paler but not dissolving. Within the cell, and occupying a position

somewhat nearer the circumference than the centre is the nucleus with all the characters above given. Two or even more are often found in the same cell, and as this rarely happens in the epithelial or any of the other normal elements of the body, it forms another characteristic peculiar to this class. Immediately around the nucleus is often found a large quantity of granular amorphous matter the granules of which are of a fatty nature, and may exist in such numbers as to completely hide it; but then, it is by no means difficult to distinguish the cells thus filled from these bodies, known as the *exsudation corpuscles*. It has already been explained (in a former lecture) that in general, when an anatomical element, normal or pathological, is developed in the neighborhood of a tissue, this element, without losing the characters of its own kind, still has a tendency to assume a form somewhat approaching to that of the cells, near which it finds itself. This rule is applicable in this case. When a cancer is developed near the skin, its cells takes an appearance something similar to epithelium, although at the same time, readily distinguished from this latter. This fact may explain, or at least account for one form predominating over others in certain parts of the body. Without being aware of this tendency to assume the form of normal cells, we might find great difficulty in diagnosing a cancerous tumor of the liver or other organs where this disposition is most marked. But once known it is a new character added to those already mentioned by which we are able to distinguish this body from all others.

*Caudated Cells*.—These differ from those of the second variety, by having one or more prolongations proceeding from their edges. Formerly they were considered the only characteristic element of cancer; further experience, however, has proved this to be incorrect. In other respects they fall under the general description of the type, cell and nucleus. The reactions are the same.

*Fusiform Cell*.—These somewhat resemble the fibro-plastic or elongated cell, being long and narrow, larger in the centre than at the extremities, which are more or less sharply pointed. The largest diameter of the cell being smaller than that of the contained nucleus, it naturally follows that at the point where the latter is found, there is considerable bulging and swelling of the walls. Where two nuclei exist in the same cell, they are placed with their long diameters in the same straight line. Reactions the same as in other varieties.

*Concentric Cells* are something like those of the same nature found in epithelial tumors. The cell-mass seems to surround the specific nucleus, and nucleolus in different layers for which

reason some authors have called them the "onion cells." The mass often has large cavities, as it were, dug out of its substance, either empty or containing molecular granules. Large grayish bodies about the seven one-thousandths of a millimetre in size may also be found. Acetic acid dissolves them. Where these cavities are very large, the proper nucleus of the cell will appear as if shoved to one side. M. Robin looks upon this as an "*alteration senile*." In almost any preparation of cancer these may be found.

*Amorphous Matter.*—This is always in large quantity in the encephaloid tumors, and less in the squirrhous variety, and the peculiar appearance of the first is owing to it. The amorphous matter may be either hard or soft according to the nature of the cancer in which it is found. When the nuclei are of the free kind, they are embedded in this substance. Fibrous tissue always exists in the class of tumors we are now studying; in the squirrhous it forms a considerable proportion of the whole mass—the fibres interlacing with each other, forming large bundles; in the encephaloid or soft kind, fibrous tissue is seen, the quantity is smaller, the fibres thin and never uniting so as to form fasciculi. In exceptional cases the contrary may be seen. Lebert says that he has found medullary cancers, in which these fibres formed larger and dense bands, between which the specific cells were placed. Fatty and coloring matters are also found in these tumors. The latter are of two kinds; the ordinary pigment and a peculiar substance called xanthose (yellow) which Lebert considers as a peculiar kind of fat, and not as resulting from an alteration of the coloring matter of the blood. This substance is often found in cancers of the testicle; it has however been met with in those of the breast and eye. Crystals of cholesterine are so often found mixed with the specific cells, that some authors regard them as one of the most constant elements.

*Cancer tissue* is formed by the union of the cells, and amorphous matter forming a mass or tumor. As all the specific cells may be found in each cancer, there is, in reality, no difference in the tissue of the squirrhous or medullary, or other varieties of this affection, except in the relative proportions which the elements bear to each other.

*Squirrhous Tumors.*—The amorphous, or as it were, the basis matter of this variety is hard—the cells are of the second or third class—the free nuclei are seldom found; fibrous tissue is in considerable quantity, forming fasciculi, which cross the tumor in all directions, communicating with each other, by fibres sent off from each bundle. These fibres are less tortuous than those of the normal cellular tissue, seldom measur-

ing more than the two one-thousandths of a millimetre in diameter. Mixed in with these the yellow elastic fibre may also be found, especially in cancer of the breast.

*Encephaloid Tumors.*—The free nuclei and type cells are most frequently met with in this class; the amorphous matter is soft; there is less fibrous matter, the fibres seldom uniting into bands, their diameters smaller, and outlines by no means distinct. Between the squirrhous and encephaloid tumors, with the characters just given; all the intermediate forms may be observed. It is therefore better if we be still desirous of using those terms, which as there is but one kind of cancer, is rather useless, to depend more upon the touch and the general appearance of the mass to the naked eye, than to microscopic examination.

*Mixed Cancers.*—These are nothing more than epithelial, fibro-plastic or other tumors in which there has been a deposit of the specific cells of cancer. There is no mixture, the deposit taking place in the pathological mass, as it would in the healthy tissue, by substitution. In a cancer of the breast, for instance, none of the normal cells or fibres of the gland are ever found combined with those of the specific kind. The latter take the place of the former, and by pressure cause their absorption. This mode of development is peculiar to malignant growths.

*Melanotic Cancers.*—This is merely an accidental deposit of pigment in tumors of this class. It may, however, be laid down as a general law, that although the pigment may be deposited in masses characterized by any of the cells above described, yet in all cases of such deposit, specific cells of cancer may be found.

*Fungus Hæmatodes.*—These are cancers in which there is an exaggerated development of the capillary vessels, together with an increased proportion of softened amorphous matter. This fungoid appearance is not always characteristic of cancer, for it is often seen in fibro-plastic or other kinds of tumors.

*Blood Vessels.*—In general there are fewer vessels found in the hard than in the soft kinds of cancer. The vessels are injected with much difficulty, in the encephaloid tumors, for as they are not supported by the surrounding tissue, the slightest force is sufficient to rupture them. The veins are also frequently filled by coagula, preventing the entrance of the coloring matter. But yet it is now acknowledged by nearly all anatomists, that veins, arteries and capillaries are found in all cancerous collections.

*Suc Cancereux*, (or cancerous juice.) When an incision is made into a squirrhous or encephaloid tumor so as to obtain

a fresh surface, and the mass is then pressed between the fingers, a milky fluid oozes out upon this surface; this is the cancerous juice. To the naked eye the liquid seems of a yellowish white, is rather thick, but mixes perfectly with water. When a little is placed between two glasses and put under the microscope, using a power of at least five hundred diameters, the different cells and elements we have been describing will be distinctly seen.—*New Orleans Medical News.*

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### Case of Partial Detachment of Placenta.

DR. NELSON.

DEAR SIR—When a medical case is thought sufficiently interesting to appear in a public journal, it ought to contain something which will act as a guide under similar circumstances, or as a beacon to warn others of the danger of following a given line of treatment.

In your *Lancet* for July there is a case by J. Burke, M. D., of New York, which may well serve in the latter capacity to all of your readers who may have the fortune to meet such another. I allude to the case of "death from partial detachment of the placenta." I beg, by your permission, to make a few remarks on the treatment employed, and on what, in my humble opinion, ought to have been done in the case alluded to.

We are told that the patient was seized at 3 P. M. on a Tuesday, with pain in the abdomen and syncope, and was seen by Dr. Burke one hour afterwards. He "found her vomiting; pulse 120, small and thready; skin cold and clammy; no pain in the back, no dilatation of the os tinæ." He says: "I ordered stimulants internally and externally to bring on reaction." He saw her again at 9 P. M. There was no change for the better, but "intense pain in the abdomen, which was also tympanitic. Ordered a turpentine and assafoetida glyster; a large dose of brandy and opium to be given at intervals." Saw her again at eight next morning, with Dr. O'Reilly; "pulse 130; skin cold; occasional vomiting; pain in the abdomen not so severe as yesterday; nose pinched and sharp." They "agreed that the case was hopeless, though we were not so sure of the cause of her illness. She died at twelve, midnight"—that was thirty-three hours from the first attack, and thirty-two from the time Dr. Burke saw her at first.

Now, I would like to enquire, what indication was the treat-

ment intended to fulfill? What were the stimulants intended to do? to bring on reaction we are told; then Dr. Burke must have supposed there was collapse; but what was to cause this sudden sinking of the powers of life, in a young healthy female, who only four hours before had eaten a hearty meal? Surely when this question occurred to the mind of the medical man, as it must have done, only one answer could have suggested itself, namely, hemorrhage; the sudden faintness, pain, vomiting, acceleration of pulse, cold clammy skin, could point to nothing else; what then could simply giving stimulants do? They would cause no coagulum to form, close no open mouths of bleeding vessels; it was merely treating a symptom.

It was evident first, that the sinking could not arise from peritonitis, it was too sudden in its accession; secondly, it is as certain it could not be enteritis; thirdly, the general symptoms were those of profuse hemorrhage, and that hemorrhage could only be from the uterus, and none being visible it could only be internal. Now, I beg to enquire, what a treatment restricted to brandy and opium could do in such a case even aided by an assafoetida and turpentine injection, and for thirty-two hours nothing further was done—the woman dying, bleeding to death in fact—and two scientific men looking gravely on!

Now, in my opinion, and I flatter myself in that of most medical men, the course to be pursued would have been to have ruptured the membranes—there could have been little difficulty in that; give *secale cornutum* ℥j hourly, and if uterine action did not soon supervene apply and keep up a galvanic current on the spine and abdomen, or even the cervix uteri—if galvanism applicable in obstetrics at all, it must be in such a case as this.

A case almost exactly similar, will be found in Braithwaite's *Retrospect*, No. 28, page 183, and although it ended fatally, still a rational attempt was made to save the woman, though at the same time I think the treatment in that case was not quite as judicious as it might have been.

In Lee's *Midwifery*, page 368, we are told when treating of hemorrhage before the commencement of labor, that "there may be a great internal hemorrhage accompanied with the ordinary constitutional effects resulting from loss of blood—as faintness, sickness or vomiting, coldness of the extremities, rapid feeble pulse, hurried breathing—when there is little or no discharge from the vagina to excite alarm or to point out the source of danger when it is extreme. It is from the general symptoms of exhaustion and by the disagreeable sense of uneasiness, weight or distension of the uterus experienced, and

not from the quantity of blood which appears externally, that we are led to discover the true state of the patient—to suspect that internal hemorrhage is going on”—and once the existence of hemorrhage to any amount sufficient to cause constitutional effects is ascertained, be it either external or internal—in the latter months of pregnancy, and the placenta not being the presenting part, there can surely in the year of Grace 1854 be no discussion or question as to what is the proper mode of treatment, viz: to induce uterine contraction as speedily, as effectually and as permanently as the circumstances of the patient will admit of, and this is surely believed by the majority of medical men to be best accomplished by rupturing the membranes, the exhibition of the ergot; and if these fail, by galvanism, more speedily than by any other means as yet discovered.

I am, sir, most truly yours,

ARTHUR PATERSON, *Surgeon.*

*Woodstock, Canada West, Sept. 18, 1854.*

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### **Inflammation and complete Occlusion of Vagina.**

In July of the present year I was consulted by Mrs. —, aged 23 years, 3 years married, and having been delivered of a still-born child thirteen months previously under the following circumstances: The labor had been long and tedious—some eighteen hours of unremitted pain—allowance, however, is to be made for this assertion—and the only assistance she could command was that of an old French woman who did aught else than follow the abominable practice, resorted to by many practitioners, of “helping” the patient, i. e. the constant passing in and drawing out of the finger or hand from the vagina. The principal objection, and a serious one it is, to this procedure is the reiterated irritation induced in the soft parts by robbing them of the mucosities so freely poured out by nature to facilitate the passage of the child. But to return: a dead child was delivered followed in a short time by the placenta. The lochial discharge was pretty free for some few days when it was succeeded by pain and heat in the vagina, scalding in passing the urine and a profuse purulent discharge. To remedy this state of things various washes and injections of astringent decoctions were employed

with the effect of diminishing and ultimately of entirely arresting the discharge; the cure, however, was more perfect than had been bargained for, adhesive inflammation had united the vaginal walls and completely obliterated the canal. The patient became aware of her situation some weeks after confinement, and in this plight consulted her *accoucheuse* who was satisfied to give up the case and recommend her to try a doctor. Application was consequently made to two physicians, the true state of the matter being concealed from them, for remedies to restore the menstrual function, the patient presuming that with its return the other impediment would give way. Many remedies were prescribed and ordered, but as common sense will dictate, not only without success but with an evident increase of physical, if not of mental disturbance.

She was now induced to call upon me; and after a close and long conversation she partly admitted what she thought the trouble was, adding at the same time that she never would submit to an examination and still less so, if it were deemed necessary, to an operation. My reply was short: "Madam, you may have your own way;" and another call awaiting me, I wished her good morning, exacting, however, a promise if she overcame her false and sinful delicacy to favor me with another visit. This summary manner of disposing of the case had the desired effect; in a couple of hours she returned and readily submitted to an examination.

On attempting the separation of the labia majora I found them so closely and firmly adhering to each other throughout their extent from opposite the meatus urinarius to the fourchette that there was in fact no commissure. There was a very small orifice, scarcely large enough to admit a probe, one or two lines above the outlets of the meatus urinarius, and through which the patient informed me the urine was discharged directly upwards in a small stream. Enlarging this opening a trifle I was enabled to pass a female catheter in the bladder and the left index finger was introduced into the rectum, when neither finger or catheter could be brought sufficiently near to detect one another. There appeared to be a space of one inch or more between the two. Here was a pretty state of things indeed to favor the action of emmenagogues! The abdomen was enlarged to the size of a woman in the sixth month of pregnancy and the enlarged and hardened uterus could be clearly defined through the abdominal walls. An operation being proposed was acceded to by the patient, and, with the assistance of the husband, was performed in the following manner: The patient being placed in the position for lithotomy a straight sound was passed into the bladder

and entrusted to the assistant with directions to draw the urethra as much as possible upwards under the arch of the pubis, while I introduced the left index finger into the rectum. Then with a narrow scalpel I commenced making an incision from the small opening above to within three lines of the anal orifice below, the extent of this incision being deemed proper to guard against too great an amount of contraction in the processes of granulation and cicatrization. Alternately guided by the sound and finger I continued the dissection upwards and backwards following the curvature of the sacrum cutting through solid and firmly organized tissue. Examining now the progress I had made, the right index finger could be introduced its whole length in the wound, and yet no cul-de-sac of the vagina could be discovered and much less could I feel the os tincæ. I was now enabled to ascertain that I was leaving a clear space of about a quarter of an inch for the walls of the new vagina between the urethra above and rectum below. Cutting for about one inch more my knife suddenly encountered no further resistance, and immediately a gush of grumous blood told me that the operation was completed. There was but little hemorrhage; the vagina being thoroughly syringed with cold water till there was no more bleeding, I introduced, well oiled, a speculum, and discovered that all but half an inch of the vagina had become implicated in the adhesive process, and there was some ozing from the mouth of the womb. A number 5 bougie was gently introduced through the os tincæ, and some thirty ounces of dark sanious blood, the accumulated product of ten or twelve menstrual periods, were discharged. Numerous small balls of cotton wadding well oiled were pushed up the vagina distending it to its utmost. The patient was now directed to return home, private reasons not permitting of her remaining in this village, with the injunction of removing the tampon night and morning, syringing out the vagina with tepid water, and plugging it up anew. She faithfully followed the directions for three weeks, when she reported herself at my surgery. An examination satisfied me that the operation was entirely successful, there was little or no contraction, the parts were entirely healed, and as good a vagina had been made as the most fastidious could desire.—*Nelson's Am. Lancet.*

### Treatment of Itch in Paris.

M. Hardy, at the present time, has charge of the itch department of the hospital, and has improved the method of effecting rapid cures introduced by M. Bazin to which I have just alluded.

The method of treating scabies, the introduction of which at St. Louis is due to M. Bazin, consisted in first employing baths, and forcible friction with soap, in order to cleanse the skin, and rupture the vesicles; afterward, friction three times daily, for two successive days, were made with the *pommade d'helmerick*, which is composed of sulphur, the carbonate of potash and lard.\* The latter frictions ended, another bath, with soap, was employed, and the patients were discharged cured in three days.

The plan at present pursued, as perfected by M. Hardy, is as follows:

The patients first apply, with friction, *savon noir* (soft soap) and take a warm bath, which occupy an hour. Next they continue friction with the *pommade* of sulphur and carbonate of potash for half an hour. An alkaline bath comes next in order, lasting half an hour. The whole process consumes two hours, and they are at once discharged cured. They are, however, requested to return at the next day appointed for external consultation for cases of this description, in order to be examined, and if the cure be not complete, the process is repeated. I was assured that five of every six cases are effectually cured by one process. Other eruptions, however, eczema, impetigo, and lichen, succeed in a considerable proportion of cases.

The exhibition of the application of this method of cure to a large number of cases collectively, is one of the medical curiosities of Paris, which should not be overlooked more than the operations with the hot irons by Jobert. Two days in the week are designated for persons to apply for treatment. At the time I was present, there were from thirty to forty candidates. Sufficient accommodations were provided for the whole number to bathe simultaneously. After the bathing, they were marched into a room by an official in uniform, who described to them the details of the stage of the process which was next to take place. On the floor was a large *tumulus* of the *pommade*. They were directed to take, each a certain quantity, and to rub all the accessible parts of the party,

\* Carbonate of potash, one part; sulphur, two parts; lard, eight parts, (by weight.)

using forcible friction; they were to apply the *pommade* to the back for each other; the frictions were to be continued for half an hour. The comical exhibition of from thirty to forty naked persons carrying into active execution the foregoing instructions, can be better imagined than described. A few of the patients were children too young to make the applications for themselves. In these cases the duty was performed by assistants. The children gave evidence of the severity of the frictions by loud lamentations, and some of the men were unable to sustain the smarting with perfect stoicism. The half hour expired, an alkaline bath followed, and the process was finished.

This treatment is based on the doctrine that the disease is dependent on the presence of the living *acarus*. The object is to uncover the insect, force it from the burrow, and destroy it by means of the sulphur, alkali and lard, and, also, the germs of a future offspring. This doctrine, however, is not accredited by all. M. Devergie, for example, regards the production of the *acarus* as merely incidental to the progress of the disease, not the efficient cause of the disease. He would account for the cure by the measures just described, not solely because the *acarus* is destroyed, but from the medicinal efficacy of the remedies employed, irrespective of this effect. In his opinion the measures are needlessly active and rough; and injudicious in consequence of the subsequent eruptions to which they frequently give rise.

The history of the discovery of the existence of the *acarus scabii* is connected with a curious imposition practiced at St. Louis. An Arabian physician first noticed the presence of an insect in connection with the itch vesicles, but the fact excited little or no attention, and was almost forgotten until the sixteenth century, when it was described by Hauptmann. It was described by Cestoni in 1687. Alibert and Biçet, however, the distinguished physicians at St. Louis, failing to verify its presence, were led to deny the fact of its existence. The opinion of these writers was regarded as such high authority, that, in France, the coexistence of an insect with scabies was generally either distrusted, or disbelieved; when a person named Galès (a name singularly resembling that of the disease in French, viz: *gale*) professed to demonstrate the fact of its presence, by adroitly producing the *mites* from cheese which he pretended were extracted from the itch vesicles. He practiced the fraud with such success, that the academy of medicine, having appointed a commission to examine the subject, and witness the process of extraction, were completely deceived, and distinguished honors were conferred on M. Galès.

The subsequent discovery of the imposition tended to render the existence of the true *acarus* more doubted than before, but at length, the fact was established beyond farther question by M. Renucci, M. Albin Gras, and M. Raspail in 1834-5, and M. Bourguignon in 1843.\*

I witnessed the extraction of several *acari* by M. Fremineau, a young physician of great promise, one of the *internes* at St. Louis. Vesicles were selected which were recent, and presented a well marked furrow. Introducing the needle at the extremity of the furrow and withdrawing it, a small opaque body was apparent on the end of the needle, which, placed on paper, gave evidence of animation to the naked eye, but more clearly with a common pocket magnifying glass. Dr. Wilson states that the animal seizes hold of the needle, and is thus brought out. This may be doubted. The cuticle at the end of the furrow being gently raised, if the *acarus* be there, it forms a free body in so small a space, that it is easily, as it, were, *scooped up* with the instrument. M. Fremineau easily caught one at the first trial, and very little time and trouble were required to collect a number for subsequent microscopical examination.

The present mode of treating scabies has been of great utility to the hospital. Formerly patients with this affection were admitted into the wards, and constituted a large proportion of the cases in the hospital. Now they do not enter the hospital, and hence the accommodations for other cases are proportionably greater than they were.

A vast number of out patients are examined and prescribed for at the St. Louis Hospital. For this purpose the medical officers attend at the consultation room daily, in rotation. For these cases as well as for the patients in the hospital, extensive bathing accommodations are provided, and a large proportion of the patients who apply, receive only permits for simple or medicated baths. The number of baths administered is immense, viz: in one year 50,000, exclusive of 40,000 fumigations, and 2,000 *douches*.

The following description of the provisions for bathing, etc. at St. Louis, is copied from notes written after a visit made expressly to examine this department of the institution: In a long ward on the ground floor are thirty bathing tubs, arranged in two rows, with provision for the supply of cold and warm water in any quantity. These are appropriated every Wednesday and Saturday, in the forenoon, by patients who undergo the process for the cure of scabies.

\* These statements are quoted from the work by M. Devergie.

Adjoining this ward is a small apartment containing accommodations for two baths, for isolated cases.

An apartment is devoted to *douches*. A metal tube is connected, by means of a long flexible hose, to a spout regulated by a stop-cock, allowing a stream of water to be directed, at different distances, on any part of the body. There are arrangements for *douches* with warm or cold water in this apartment. In another room is a chair constructed for the administration of *lavements*.

Passing into another apartment, a metal cylinder about two feet in diameter, extends from the stone floor, vertically, about two feet and a half. This room is small, the walls as well as the floor is of stone, and a series of stone steps, constructed in the form of a semicircle, extending upward about ten feet. This apartment is for vapor baths. The patient taking different altitudes by means of the stone steps, can vary, to some extent, the degree of exposure to the vapor.

In another room shower baths are administered, the stream of water being subdivided into a great number of jets.

Lastly there is an apartment for fumigations. These are administered by placing the patient within a box containing a series of chairs. The box is tightly closed, with the exception of holes in the top through which the head is passed, leaving the body within the box. The fumes of the medicinal substance employed are produced by heat, conducted within the box, and in this way, brought into contact with the body.

The different kinds of baths, douches, and fumigations prescribed at the hospital, are as follows: 1. Simple bath. 2. Vapor bath. 3. Sulphurous—(1. Strong.) 4. Alkaline—(2. Ordinary.) 5. Starch bath, (*de fécule de pommes de terre*.)

The last mentioned is of two forms, viz: 1. Strong. 2. Ordinary.

*Douches*.—1. Sulphurous. 2. Vapor. 3. Alkaline.

*Fumigations*.—1. Sulphurous. 2. Mercurial. 3. Aromatic.

A valuable feature of the practical work by Devergie is that considerable space is devoted to the consideration of baths in connection with the management of cutaneous diseases. Much importance is attached to the employment of the different kinds of baths, by the French practitioners, in the treatment of diseases generally, as well as those seated on the cutaneous surface. They employ them to a much greater extent, both in private and public practice, than is the custom with us. In this respect, it is probable that American practice offers room for improvement; and, if my leisure permitted, I would append to this letter a translation of that por-

tion of the work just referred to, which treats of this subject. I may find time to do this hereafter; meanwhile, I remain,

Very truly yours,

AUSTIN FLINT.

*Western Journal of Medicine and Surgery.*

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### **Instrument for producing Compression in Orchitis.**

BY T. L. OGIER, M. D., OF CHARLESTON, S. C.

MESSRS. EDITORS—I send you the following description of an invention of mine, which, if you think worthy, insert in your journal.

The treatment of orchitis by adhesive straps, applied so as to exercise a gentle pressure on the gland, is, I believe considered by surgeons, a great improvement to the old plan of leeching, fermentations, cold applications, &c.—the bandaging giving immediate relief from pain, and reducing the swelling considerably in a few hours, and this without confining the patient to his bed.

In treating cases of orchitis, I have found the swelling so much reduced the morning after the straps were applied, that they no longer gave any support to the testicle, and, therefore, to be efficient, had to be reapplied every ten or twelve hours, or oftener; for as soon as the pressure of the plaster is taken off of the gland, by the latter becoming smaller, the straps no longer act beneficially, and the curative process is arrested until a fresh support is given to the swelling by a reapplication of the dressing. Now, this constant reapplication of the straps is troublesome and painful, and if not attended to as soon as they become loose, no longer give any support to the enlarged gland, and the cure is protracted.

To remedy this defect, it seemed to me that an elastic pressure exerted gently on the swelling, would be efficient—a pressure that would be constantly exercised on the swelling, notwithstanding it became reduced in size. For this object I had made an oval bag, about the size of a turkey egg, netted of thin india-rubber thread—the body of this bag was netted with pretty coarse meshes, so as to be open and cool, but the neck was netted much closer and finer. When this is stretched open and the testicle put into it, the pressure, on account of

the closer work (around the mouth of the bag) is a little greater than it is elsewhere—it therefore remains on perfectly well, and there is a gradual and gentle pressure exerted over the whole gland, until the swelling is completely reduced.

*Charleston Medical Journal and Review.*

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### On the proper Position of Women during Labor.

BY M. MORTON DOWLER, M. D.

Does the dorsal *decubitus*, which is usual in France ; or the left side position, which is preferred in England ; or, the pro-nation of the body supported on the knees and elbows of the patient, involve merely a question of habit, an affair of fashion or of national manners? Does not each of these attitudes, on the contrary, fulfill a real indication? M. Hubert thinks it does, and very well demonstrates his position.

According to him, in order to operate in a case of version, if the child, with shoulder presenting, has the belly turned backward, it is better to leave the woman on her back. The operation can be effected with greater facility. But, if the fœtus has the belly turned forward, and its pelvic members are placed against the anterior parietes of the uterus, then, allowing the woman to rest on her back, the accoucheur can only reach the feet by carrying the hand in the prone position, and strongly forward ; or, if the *liquor amnii* has escaped and, especially if the belly be projecting, the arch of the pubis compressing the fore arm, would soon cause it to be benumbed, and render it unable to act, and would prevent it from penetrating as far forward as is sometimes necessary.

On the contrary, if you place the woman on her elbows and knees, and apply the hand in a state of supination, you have but to follow the anterior parietes of the uterus and pelvis in a line almost straight and horizontal from behind, forward, which is done with the greatest facility. But this position, besides wounding the modesty of the woman, being tiresome to maintain, the following is the method by which M. Hubert succeeded in realizing all its advantages, without subjecting the patient to these inconveniences. He allows the woman to remain on her back till the right hand has cleared the cervix uteri ; he then flexes the right thigh and leg of the patient, and then, while she turns or some assistant turns her on her left flank, he passes the flexed limb above his right arm, and he is

thus placed opposite the patient's back. He can then attain the antero-lateral left, and even the anterior parietes of the womb, in order to find the feet. Having brought them to the vulva, he places the woman on her back.

By this ingenious proceeding, M. Hubert draws from the pronated attitude of the body, in delivery, all the advantages of which it is capable of rendering, without imposing it on the patient. He cites numerous cases, thanks to the advantages of manœuvre, which many of his confrères, who not being otherwise able to touch the feet of the foetus, have been able easily to reach them when the hand, seconded by this change of position, has been enabled to penetrate further forward.

To complete the delivery, if the power of traction is lost by the resistance resulting from the anterior parietes of the cervix, and the placenta cannot be with facility drawn forth, the woman must be laid on one of her sides, and the accoucher standing behind her, must simply draw towards himself. If there be no abnormal adherence, these tractions, being very near parallel to the axis of the uterus and that of the superior strait, the delivery will be easily effected.

*New Orleans Med. and Sur. Jour.*

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### Radical Cure of Hernia.

BY M. JOBERT DE LANBALLE.

M. Jobert demonstrates, by observation, the advantages of this method. He presented, a few days since, to *L'Academie de Medecine*, three cases, upon which he had operated with the most happy results. No untoward accident occurred during the treatment, and in each case the cure was radical. Its efficacy and results are not, therefore, to be doubted. This method is by no means to be compared to the numerous plans, which have, up to the present time, been put in practice, for the radical cure of this troublesome infirmity. These have presented, in their execution, immense difficulties, while the method of injection, which is perfectly harmless, is always attended by far happier results. M. Jobert performs this operation by two different methods, which are based upon the state of the sac, whether empty or filled with a serous liquid. The puncture and injection represent the first proceeding—the incision, puncture, and injection the second. He maintains that the puncture should always be made by the aid of a trocar,

and never with the bistoury, which might compromise the operation, by exposing the internal surface of the sac to the contact of the air, and by permitting the infiltration of liquids into the tissues of the scrotum.

*First Proceeding—Puncture and Injection.*—Whenever the sac is adherent to surrounding parts, the tunica vaginalis not obliterated, and the sac contains a serous liquid recognized by fluctuation or transparency; and whenever the hernial pouch is thickened or cartilaginous, he does not hesitate to make the puncture of the hernial sac by traversing obliquely the different fascia which cover it. The trocar is plunged perpendicularly at first, then obliquely, and arriving at a certain depth it is pushed slowly backwards, until it pierces the pouch, which is indicated by the want of resistance and the freedom of movement in the instrument. Then the injection can be made without difficulty. A syringe is used for this purpose, and ordinarily, about two tablespoensful of the pure tincture of iodine are injected; sometimes less, depending entirely upon the size of the serous pouch. The injection is suspended whenever resistance is felt, and instead of allowing it to flow back through the canula, it is withdrawn by means of the syringe. The canula is then removed, and a small piece of adhesive plaster applied over the wound.

*Second Proceeding—Incision, Puncture and Injection.*—Whenever the sac is thin, moveable, and easily dispersed by pressure, an incision is made before the puncture. This operation M. Jobert performed on one of the cases he presented to *L'Academie de Medecine*. While the viscera are projecting, an incision is made two or three centimeters in length, upon the most sloping part of the tumor, cutting through the integuments, and several layers of fascia. This being accomplished, the patient is requested to cough, in order that the pouch may become distended. The sac is then seized by a tenaculum, upon which slight traction is made, and the trocar is introduced immediately above the tenaculum, care having previously been taken to return the viscera, and to have them kept back by the hand of an assistant. The injection is then made in the same manner as in the preceding operation. The lips of the wound are then secured by a suture *entortillée*. Immediately after the operation, a liquid of new formation is deposited in the interior of the hernial pouch. It is not deemed necessary that the iodine should be brought into actual contact with the whole surface of the sac, for the action of the liquid will propagate itself to the untouched portions. During the first twenty-four or forty-eight hours the sac is filled with the new secretion, and for about eight days the

tumor remains stationary, and preserves signs of fluidity. Afterwards it begins visibly to diminish and becomes harder, until it acquires the solidity of wood.

The first case presented to *L'Academie de Medecine* by M. Jobert, was that of a young man, eighteen years of age, who had an oblique inguinal hernia of the left side, about the size of a walnut. This did not prevent him following his daily occupation, but he had been judged unfit for military service, in which he wished to engage as a volunteer. He entered Hotel Dieu on the 8th May 1854. He does not know from what period his hernia dates, but recollects having worn a truss in his childhood. For a long while this hernia gave him no inconvenience, and it was only within the last fifteen days, previous to his admittance into the hospital, that he found it necessary for him to avail himself of the use of a truss. The tumor did not descend to the bottom of the scrotum. Its inferior limits was separated from the testicle by a constriction in the form of a band. It was easily reduced by taxis, but immediately returned when the patient coughed, or rose to his feet. He begged for an operation, and M. Jobert decided to attempt a radical cure by means of the injection of iodine. May 12th the patient was brought into the amphitheatre, and placed upon the table. M. Jobert then made an incision two centimeters in length, along the course of the inguinal canal. A fine trocar was then introduced, through the canula of which five grammes of the pure tincture of iodine were injected. The fingers of an assistant were placed upon the ring, to prevent the iodine from coming in contact with the peritoneum. The patient suffered but little. One point of the suture *entortillée* approximated the lips of the wound, which was dressed with cerate. In the evening there was considerable swelling, active pain caused by coughing, bowels indolent; no fever. On the 14th there was still considerable swelling and redness of the parts. The pin of the suture was removed. Reunion incomplete. In a few days the external wound cicatrized, the superficial engorgement disappeared, and on the 5th June the patient walked about the wards and coughed, without feeling the slightest impulsion of the abdominal viscera. The left testicle is of the same volume as that of the opposite side. As a precautionary measure, M. Jobert advises him to wear a suspensory for some time.

The second case was that of a man thirty-four years of age. He had two infirmities, a hydrocele, and an oblique inguinal hernia, congenital, separated by a ring representing a contraction. This incomplete partition, sort of a diaphragm, caused by a contraction of the vaginal tunic, sustained the

viscera by its upward face, the lower or inferior presenting towards the testicle. M. Jobert proposed to the patient to obliterate the tunica vaginalis; and to attempt, at the same time, a cure of the hydrocele, and of the inguinal hernia. The operation was performed in the following manner: Oblique puncture of the trocar into the thickness of the tunics of the scrotum; the instrument then being pushed on slowly until it pierced the parietes of the tunica vaginalis. The canula did not give issue to more than a large tablespoonful of serous matter. Pure tincture of iodine was then injected into the tunica vaginalis and the hernial sac; the fingers of an assistant being applied upon the track of the inguinal canal, to prevent the iodine coming in contact with the peritoneum. A small piece of adhesive plaster was placed over the wound, and a small cushion sustained the testicles. The next day the scrotum was distended by a liquid exhaled into the tunica vaginalis, the skin red and moderately tender, but the patient complained of no pain, and there was neither fever nor reaction. Two days afterwards the swelling was diminished a little, and twelve days after the operation the tumor was much diminished, and the course of the inguinal canal filled with a cylindrical cord. The patient improved day by day, and one month after the operation the scrotum had returned to its normal volume, but the cord possessed a consistence very superior to that which it formerly had. The patient left the hospital cured.

The third case was one of an oblique inguinal hernia of the left side, reducible, about the size of a large pear. The patient is twenty-seven years of age; having contracted the infirmity at the age of eighteen, without being able to attribute it to any effort, or external violence. The divers bandages that were employed had failed to retain the hernia so as to prevent its escape in the act of sneezing and coughing. The patient and his family had often asked M. Jobert to disembarass him of this infirmity, and after consultation with M. M. Rayer, Bégine and Cloquet, it was determined that the operation should be performed in the following manner: The patient was placed in a horizontal position, the legs slightly bent on the thighs, and maintained in this position by the aid of a bolster. M. Jobert then introduced a trocar into the tunica vaginalis, and injected pure tincture of iodine. Almost immediately, a considerable tumefaction appeared in the place of the hernial sac, and in fifteen hours the tumor had attained the volume of the hernia. The skin of the scrotum was distended, but not red, and a fluctuating liquid, half solid, was felt in the interior of the tumor. During the first eight days

the parts remained stationary. After the fifteenth day the tumor began visibly to diminish, and what remained assumed the rigidity of a piece of wood. On the twenty-fifth day after the operation, the course of the cord was occupied by a cylinder so hard and compact, that the patient was able to get up and walk about, without the least tendency to a protrusion of the viscera. Four months have now passed and the cure is fully maintained. M. Jobert has now under his care three cases, upon which he has operated within the last ten days, and he has no doubt that radical cures will be effected in all of them.—*Memphis Med. Rec.*

*Paris, September 3, 1854.*

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### Cancer of the Neck of the Uterus.

We have employed, observes M. Remilly, the perchloride of iron to arrest the uterine hemorrhages which so frequently accompany cancer of the neck. It is administered by injections, in the strength of 15 of the perchloride to 250 of water. The dose required is usually 15 grammes of the perchloride (5 drachms English.) A woman, æt. 60, suffering from cancer uteri, voided daily large clots of blood from the vagina, some as big as the fist. Two injections (September 12,) at the interval of five minutes, sufficed to arrest the hemorrhage for three days. On the 15th, the blood flowed again, when two fresh injections were administered with success. On the 16th and 17th the injections were continued without any recurrence of hemorrhage. On the 18th, the patient, who had lost no more blood, became pale and faint after the second injection—symptoms which seemed referable to the remedy, as the external organs of generation were temporarily swelled. She soon, however, recovered; and, from October 26th to November 19th, she has remained free from any return of the bleeding.

A second patient, æt. 49, suffering from soft, vascular, fungous growths from the os uteri, accompanied with a discharge of dark, fetid blood from the vagina, was subjected to the same treatment. The first injection produced an immediate disappearance of the discharge. The day following there was a second discharge, which was not arrested by the injection, but the patient declared that the instrument had been badly introduced. The next day the remedy was used with more care, and with complete success.

A third and a fourth case are related by M. Remilly, illustrating the decided benefits ensuing from this plan of treatment; and he remarks, that not only does the injection relieve the patient from troublesome and often offensive discharges, but that it retards the progress of anæmia and prolongs her existence. It is impossible to say what effect the perchloride may have upon the future progress of the cancerous disease; but it may assist, by arresting weakening losses of blood, in rendering more decidedly beneficial tonic and ferruginous remedies, employed so often without the least success in combatting cancer and its complications.

*Memphis Med. Recorder.*

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### Iodine Injections.

M. Boinet relates several cases of fistula in ano for the purpose of showing the value of this kind of treatment—a treatment which acts by the adhesive inflammation which it excites, and which was first recommended and practiced by Mr. Charles Clay—and from these cases he considers himself entitled to conclude that this treatment possesses many advantages over the one commonly in use. It is less inconvenient and less dangerous. It does not necessitate a long confinement to bed and daily dressings. It is comparatively free from pain, and it is easy to carry into effect. It is applicable in all cases, whatever the form of the sinus or sinuses, and particularly in those cases in which the knife cannot be used without difficulty or danger. It does not prejudice the position of the patient, even where it does him no good. For these reasons M. Boinet concludes that it ought always to be tried before having recourse to the knife.

The preliminary precautions are similar to those which are taken in the ordinary operation, viz: to empty the bowel by injections or by other means, and so to regulate the diet that the patient will not require to have a stool until the new adhesions have had time to form. The ordinary injection is composed of half a drachm of iodine, fifteen grains of iodide of potassium, and two ounces of water, or thereabouts; a stronger injection, of a drachm of iodine, fifteen grains of iodide of potassium, and about an ounce and a quarter of water. One or two teaspoonsful of either of these solutions is injected by means of a glass syringe, with a nobbed canula, a finger having been previously placed upon the opening of

the rectum so as to confine the injection to the bowel (if such an opening exist,) while at the same time precautions are taken to prevent it from flowing away from the outer opening, for at least five or six minutes. This operation is repeated every five or six days, or at shorter or longer intervals, according to circumstances. Sometimes a single operation has sufficed for the cure.—*Ib.*

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### Recovery after taking a large Dose of Prussic Acid.

Mr. W. H. Burman, of Watch-upon-Deerne, has communicated a very interesting history of the recovery of his father from accidental poisoning by prussic acid. We regret that our limits compel us to confine our notice of this instructive case to a short abstract. Mr. Burman, sen., took, by mistake, a drachm of Scheele's acid instead of diluted acid. In a few seconds he perceived by the bottle the mistake he had made; he immediately swallowed half an ounce of aromatic spirit of ammonia, with a little water, and then called to his son, and told him what had occurred; he spoke hurriedly, breathed deeply. Mr. W. H. Burman immediately administered some solution of crystals of sulphate of iron, trusting to the ammonia swallowed previously for the formation of an insoluble compound of the acid with the oxides of iron. This was two minutes after the poison had been swallowed; from this time, for twenty minutes Mr. Burman had no recollection of anything that was taking place. Respiration became deeper and slower. Four minutes after taking the poison, cold douche was freely employed, and more solution of sulphate of iron with spirits of ammonia administered. Vomiting took place; a slight convulsive shudder occurred; the cold effusion was persevered in, with the occasional administration of spirits of ammonia. In twenty minutes he began to exhibit signs of returning consciousness. In about fifteen minutes later he was able to walk up stairs to bed. Perfect recovery took place. The patient was of about sixty years of age, and of a strong constitution.

By chemical analysis, Mr. W. H. Burman found that the quantity of the acid which his father had taken contained 2.4 grains of anhydrous acid. Mr. Burman observes that this is the largest recorded quantity taken and followed by recovery. It is also a matter of interest in this case that the time at which insensibility came on is so exactly known, viz., two minutes after the poison was swallowed.—*Lancet.*

### Advantages of operating in certain Cases of Hare-lip at a very early Age.

BY HENRY SMITH, ESQ.

It is obvious in the first place, that an infant with hare-lip cannot so readily take in that nourishment which is offered by nature. If, however, the deformity be remedied, the child will be placed by the aid of surgery in a much more favorable condition to receive the nutriment afforded by the mother's breast. It is plain, too, that the deformity excites most unpleasant and painful sensations in the mind of the mother and those around her; and, if the source of this anxiety can be removed at once, it is of great importance that it should be accomplished.

A third argument in favor of very early operation for hare-lip consists in the circumstance, that as the growth of the child is very rapid in the first period of life, the lip, with other structures of the body at this time, becomes more fully and fully developed, and thus, after an operation has been successfully performed, there will be a much less chance of subsequent deformity in the part. But it is in those instances where the hare-lip is complicated with a more or less extensive fissure in the palate that an early operation for the cure of the former is so imperatively demanded, and is attended with some beneficial results; and it is to this point especially I wish to draw attention, because, although in some recent works of surgery an operation at an early period after birth is recommended, (and I may especially allude to the *Practical Surgery* of Professor Fergusson, and to the *Surgeon's Vade Mecum*, by Dr. Druitt,) the most important reason for such a proceeding is not alluded to. And I now refer to the effect which is produced upon the fissure in the hard palate by the approximation of the edges of the lip. As long as the hare-lip remains in its primitive state, there can be no pressure upon the hard tissues underneath; but, if it be united by the surgeon, a considerable amount of pressure is exerted upon the cleft in the palate; and, in a child aged only a few days or weeks, the bones are so soft and compressible, that they are to a great extent influenced by the pressure which constantly obtains, and in the course of time the fissure becomes either entirely closed or diminished in size to one-third or one-fourth of its original extent.

I have had various opportunities of noticing this effect in instances where a very early operation has been performed for hare-lip, complicated with more or less extensive fissure in the

hard palate; and so convinced am I of the importance of performing the operation as soon after birth as possible, that I invariably recommend it. And it has fallen to my lot to be called upon to perform the operation very soon after birth, where there has been, at the same time with the hare-lip, considerable malformation of the palate; and I have been able to notice the result some length of time afterwards. More than three years ago I operated upon an infant only four days old; here there was an extensive fissure extending through the hard palate into the nostril. I had an opportunity of seeing this child only a few days since, and the opening in the front portion of the palate was closed up. In this case the soft palate was extensively cleft, and that still remains open; but the parts altogether are in such a condition that, some years hence, they may be completely closed by staphylorraphy. A few weeks since a little patient was brought to me, on whom I operated at a very early age, two years ago. In this instance there was a fissure in the hard palate, and great deformity of the jaw, a portion of which I removed at the time. There is now an admirably developed upper lip, and complete closure of the opening which existed in the palate. In another instance, where I operated at an early period, there was an immense chasm running through both soft and hard palate into the nostril. I had an opportunity of seeing this patient a few days since, and found that the anterior portion of the cleft was much diminished in size. The operation was done more than a year ago.

Mr. Bateman of Islington, who pays great attention to this matter, operated, three years since, upon an infant only four hours after birth. In this case there was an extensive fissure in the palate. This gentleman kindly showed me this case, and, in reply to my enquiry regarding the effect which the operation had had upon the palate, he wrote word the other day that the child had died of whooping-cough last winter, but that its mother remarked that before death the fissure, which had at birth been "so large that she could put her thumb into it, had contracted so much that it would scarcely admit the edge of a sheet of writing paper." About a month since I operated upon an infant only six days old, with perfect success. In this case I was partly induced to perform the operation at this early period because there was a fissure in the hard palate, extending into the nostril. I have little doubt that, in time, if the child lives, the fissure will be completely closed.—*Med. Times & Gaz.*

### Hot Hop Bath in Traumatic Tetanus.

Dr. James M. Minor of Brooklyn, N. Y. reports a case of acute traumatic tetanus successfully treated by local cauterization, followed by anodyne poultices, opium and quinine, chloroform inhalations and liniment, &c. In addition to these remedies, the patient was several times placed in a hot bath in which two washbasins of hops were infused. The bath tub was covered, (except a small space over the face,) with a counterpane or blanket, causing the patient to breathe as much of the vapor as possible. Great relief was always obtained from the use of this remedy. Dr. Minor remarks, "*The hot hop bath I consider to have been more immediate and striking in its remedial operation, than any other of the remedies used.*" I should be most happy if this paper may induce others to resort to it in similar cases in order that its efficiency may be tested more fully. My experience of its effects in this case and also in several cases of *mania a potu* has caused me to place a very high value upon it in all cases of nervous irritation. Upon opium in the large and frequently repeated doses as above detailed, I place great reliance, and cannot but look upon it as the most potent and valuable of all the drugs used in this disease. Brandy and the most nutritious diet doubtless played an important part and materially aided in the final result.—*New York Medical Times.*

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### Laceration of Perineum.

Dr. W. Parker reports in the New York Journal of Medicine a case of extensive laceration of the perineum involving the sphincter ani, successfully treated by *subcutaneous* division of the sphincter on each side paring the edges and retaining them by quill suture.

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### Prize Essay.

The New York Academy of Medicine offer a prize of one hundred dollars for the best practical essay on *cholera infantum*. The academy has liberally invited the medical profession of the world to compete for the prize. All essays must be handed in during the year (Oct'r '54 to Oct'r '55,) to Dr. J. M. Smith, or one of four others of a committee to be hereafter designated.—*N. Y. Med. Times.*

### **Treatment of Ulcers by Anaplasty.**

Dr. Frank Hamilton of Buffalo has published an article in which he claims having proposed this method of treatment in 1846. This has called out Dr. John Watson, a surgeon of the New York Hospital, who refers to a report of this operation performed by himself in the year 1844. See his interesting article in the New York Journal of Medicine for November 1854.

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### **Inperforate Anus.**

Dr. Mark Stephenson of New York reports a case successfully treated by operation. He thinks the success entirely dependent upon tearing instead of cutting the tissues between the integuments and termination of the intestine. There is much less hæmorrhage and less tendency to contraction when the passage is opened in this way.

*New York Med. Times.*

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### **Lithotomy terminating Fatally.**

The following very unusual case is reported in the Medical News as having occurred in one of the London hospitals:

A man, aged 45, a drunkard; the usual lateral operation was performed, Blizard's knife being used, and the stone was quickly extracted. The man died on the third day, and at the *post mortem* there was found an incision in the coats of the bladder, opposite to where the knife had entered. The mucous membrane was the most extensively injured, and it was doubtful whether the peritoneal coat had originally been cut through, or had been torn in the removal of the parts after death. The knife which had been used being one with a blunt point, it was difficult to account for the infliction of the injury discovered, excepting by the supposition that the bladder might have been irregularly contracted at the time, and that the cutting edge of the knife had been applied, possibly during withdrawal, to the edge of a fold.

### Notice of Dr. John A. Cunningham.

In this number of the Stethoscope will be found the portrait of Dr. JOHN A. CUNNINGHAM. He was elected president of the Medical Society in the year 1847.

Dr. C. commenced his professional career in the country, practicing extensively in the counties of Cumberland and Goochland. In 1841 he removed to this city, where his practical experience and urbanity of manner soon procured for him a large share of business.

### Prize Essay.

At a meeting of the Medical Society of Virginia, held in April 1853, the following resolutions were adopted :

1. That a medal or some suitable testimonial, not to exceed fifty dollars in value, be awarded annually by the society for the best Essay upon some Medical Subject.

2. That a committee of three be appointed to examine all Essays that may be offered, and select the one worthy of such medal or testimonial.

At a meeting of the society, held in April 1854, on motion of Dr. Atkinson, it was resolved that the subject of the next Prize Essay should be *Pneumonia*, and the president of the society was directed to appoint a committee of three to award the premium.

In order to carry out the above resolutions, the president of the society has appointed the undersigned a committee to examine such Essays as may be offered on the subject of pneumonia. All communications must be addressed to the chairman of the committee. They must be accompanied by a sealed note, containing the name of the writer and bearing upon its face a motto corresponding to the one prefixed to the Essay.

Unsuccessful Essays will be returned, should the writers so desire. No Essay will be received after the 1st of March 1855.

All communications forwarded by mail must be prepaid.

DAVID H. TUCKER,  
Richmond.

JOHN STAIGE DAVIS,  
University Va.

JOHN J. THWEATT,  
Petersburg.

April 22d, 1854.





Very truly Yrs

B. Russell Ford

Lith. of Ritchie & Dunnivant Richmond Va.

THE

# STETHOSCOPE.

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THE PROPERTY AND ORGAN OF THE

## MEDICAL SOCIETY OF VIRGINIA.

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Edited by a Committee of the Society.

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VOL. V.

RICHMOND, VA., FEBRUARY 1855.

NO. II.

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### Anæsthetic Agents.

BY W. L. C. DU HAMEL, M. D.

A Paper read before the Pathological Society of Washington, D. C.

Of all the revolutions which ever took place in regard to any medicinal agents, nothing so eventful was ever known as what has been evinced in the fate of anæsthetic agents. Their advent (of the last few years) was hailed with universal enthusiasm, and seemed to be followed by complete success. By their agency a second Eden seemed to be dawning on fallen man (and woman;) pain and peril were no longer to be the lot of those doomed to undergo surgical operations, and parturient women exulted in the assured confidence that they were redeemed from the primeval curse. With rapidity these potent agents attained their crowning point of fame and universal adoption. For a time all seemed a run of unalloyed success; but the tide has now turned, and instances of death have been recorded as of frequent occurrence from chloroform both in this country, England and France, incontestably proving that it is a medicine which cannot be administered without great risk. The law up to the present time has not interposed to stop the periling of human life by the inhalation of ether and chloroform; but another death or two will rouse it into action; and surgeons, under whose sanction these agents

may hereafter be administered, will be exposed to the danger of a prosecution for manslaughter.

To prevent and to arrive at some satisfactory solution of the true cause of the late unfortunate results, and determine the principles which ought to guide us in its administration, so as to insure the blessing without the curse of an agent so potent, is a great desideratum.

Chloroform is composed of two atoms of carbon, one of hydrogen,\* one of formyle and three of chlorine. It rapidly evaporates with a fragrant smell. When inhaled it gives rise to exceedingly pleasant sensations and a rapid flow of thoughts, and images resembling a pleasant dream—then confused, and a deep sleep. The first stage is that of excitement—then follows a calm sleep, and at length stupor.

One of the most eminent surgeons of America, Dr. V. Mott of New York, in a report of cases, advocates strongly the use of this agent in surgical operations; and the cases related by him afforded convincing testimony, he says, of its inestimable value. He had no hesitation in pronouncing the discovery of ether and chloroform, as anæsthetic agents, as amongst the greatest gifts of chemistry to surgery. Hazardous and unusually difficult operations had been performed by him for the removal of tumors in the region of the neck, which he observed he would at no period of his life have undertaken in the absence of some agent to control the nervous system.

Chloroform has been recommended in various affections, with apparent success. It has been employed in infantile convulsions, reported by Professor Williamson of Manchester; in traumatic tetanus, with great success, by Drs. Bargigly Dusch and Langenbeck, after morphine, bleeding, tobacco enemata, cupping, &c. had been tried without avail.

The practical manner of explaining the *modus operandi* by those gentlemen of this agent, goes far to recommend it in such cases, viz: The death of the patient in tetanus is caused by the cramps extending to the respiratory muscles and to the heart. It rarely occurs in loss of power in the brain or spinal cord, or from exhaustion. Most of patients die before the twelfth day. Chloroform, from being taken into the blood direct from the lungs, is preferable to all other narcotising remedies which must be absorbed from the stomach. The patient should be under the influence of chloroform for days, until a point of saturation is attained. It has also been employed in insanity. Dr. McGavin of the Montrose lunatic asylum, reports several cases of its beneficial effects. The

\* And three of chlorine, or.—Ed.

patients selected were the most noisy and excited in the establishment, and he thinks it contributed much to recovery, or at least paved the way, by suspending the functions of the brain, and thus affording rest to its substance. To the accoucheur, it is of peculiar interest. It has been employed, we have account of, in at least 3,000 cases of midwifery in this country, Great Britain and the continent, and in the great amount of such it has given relief and satisfaction.

It neither prevents (says Dr. Churchill) nor weakens the contractions of the uterus, and consequently does not render the patient more liable to hæmorrhage. Amongst the objections urged against it in midwifery is that "as in sorrow shalt thou bring forth children," was part of the original penalty pronounced upon the sin of man; therefore, any attempt to mitigate the suffering is an interference with an ordinance of God. Now it will be remembered that labor in the sweat of thy brow, pain and death were equally inflicted by the same. And yet we do not hear of the wrong of lightening labor, of relieving pain or postponing death. It is preposterous to claim the privilege of relief for one sex and object to the other. Our ignorance of the cases, improper for the exhibition of chloroform, and the probability of our complicating labor by some serious accident, (says Dr. Churchill,) is an objection deserving careful consideration. I cannot, says he, see the necessity of urging its employment in natural labor, though we may be justified in running some risk where an important point is to be gained, such as perfect quietness in operations. In his own practice he never urged a patient to use chloroform, and on the other hand never felt satisfied in refusing a moderate dose when the patient urgently desired it, and no indications seemed to counterindicate it.

Chloroform, as reported by Varrantrapp of Frankfort, has been used in some 200 cases of acute pneumonia, with apparent success. The mode of administering it is of about 74 inhalations in 10 days, by means of a piece of cotton with some 60 drops. If cough or stupefaction is caused, it is removed for a few moments. Pain is diminished by it, cough less frequent, sweating stage came on earlier, frequency of respiration, and tightness of chest diminished.

Professor Byford of Evansville college reports a case of caries of the lower portion of the spine in a young lady of 18, in which he gave 36 oz. in 14 days.

It has been used externally with great relief to fresh cut wounds of the hands; also, applied freely when an operation is to be performed, tends much to lessen the pain. Dr. Channing reports several cases of cures amongst females: severe

headaches, pains in the back, limbs, spine, cramps, flatulency, vomiting from pregnancy and disturbance of the uterus, by external application.

Dr. Channing remarks in his report, the external application of anæsthetic agents is often not only useful in contributing to the comfort of the sick, but in many instances in exerting important influences over disease. Also this use of chloroform is perfectly safe. Not the least disturbance to system or organ is produced. Consciousness remains the same. The pulse, breathing and temperature are natural. The expression of relief is striking. The brain (to use his expression,) seems to have nothing to do with the matter. Local pain is abolished at once, and the nerves have no story of suffering to tell the brain. The sentinel is at his post, but his function is not needed. The part does not lose its natural sensibility, but the tingling irritation is still felt. The endermic mode is by liniments and ointments, but the simplest and best is to wet a spot in the centre of a folded clean handkerchief, and apply it to the seat of pain by moderate pressure without friction. I have found great benefit derived from it on an application in neuralgic affections and pains in the limbs and joints. Dr. Hartshorne of Philadelphia gives an account of its internal use upon himself, and found its effects similar to inhalation. He advises it in flatulent colic, and in other painful affections of the stomach. It has been recommended in delirium tremens; but having tried it a few days ago in a case, and after a trial of two days, not perceiving the benefits I expected from it, I am sorry I cannot say much for it in such cases.

A short time ago I was called to a case of strangulated hernia in a young German woman, and without going into the details of the case, with the assistance of Dr. H. P. Howard, administered chloroform, and kept up its impression without stupefying her, which proved a powerful relaxant to the system generally. We at the same time employed taxis for the reduction of the tumor, and by gentle but determined applications, at last succeeded. Without going into a discussion upon the merits of operations and taxis in hernia, still it is a question of serious consideration how far such agents might go in seconding our efforts. The statistics of the operations for hernia are appalling. It appears from the investigations of Dr. McIlwain, that scarcely less than one-half terminate fatally; and as the chances of success of taxis patiently employed are immeasurably greater, such adjuvants should indeed be fully tested.

Sulphuric ether is another agent, but is generally objected

to on account of its being slower in action and exciting violent fits of coughing, but forms a very happy combination with chloroform when pure, and is at the present day most commonly used for inhalation.

Extreme cold has been reported as an anæsthetic agent, with these results: It affects only external parts. There is said to be no danger of sudden death or inflammatory action from reaction, which is kept down. A bag of pounded ice is generally applied, and a heated knife used.

I have endeavored to be as concise and practical as the subject would allow me, and conclude with the proposition which I first started out with, that circumstances may be clearly ascertained beforehand of the difficulties with regard to the employment of these agents; and we may yet be proud of the discoveries of Morton and Simpson, and regard them as the most important gifts ever given to man.

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### Bellevue Hospital Report.

A., colored, female, about 60 years of age, of good constitution and in fine health.

*Disease.*—Cataracts of both eyes fully formed, amber colored, have existed about three years. Pupils sensitive. Patient can distinguish between light and darkness.

*Operation.*—Believing the cataracts to be hard, determined on extraction. The pupil being well dilated by belladonna, made a section of the superior part of the cornea and extracted the lens. The operation was followed by very moderate inflammation, scarcely requiring treatment, the only untoward occurrence being adhesion of the iris to the cicatrix. Two weeks afterwards extracted the lens from the other eye without previous dilatation of the pupil, believing the position of the margin of the iris to be more favorable to protrusion when in a state of dilatation than in a state of contraction. The lens very readily passed through the pupil, in consequence of the highly elastic nature of the iris. As the patient complained of some pain for a few days, applied a blister over the brow, and sprinkled strychnia to the denuded surface for the double purpose of relieving pain and favoring contraction of the pupil. Notwithstanding every precaution, adhesion of the iris again occurred.

The patient was dismissed in about six weeks from the first operation, with very good useful vision.

The upward section has decided advantages over that of the lower part of the cornea. The incision is less favorably situated for the escape of the aqueous humor at the time of the operation, which is liable to impede the passage of the knife through the chamber, by permitting collapse of the iris against its point, and is free from trickling of the aqueous humor after the operation, which impedes the closure of the incision. The upper lid covers the incision and protects it from exposure to the air during the process of cicatrization, and acts as a support to the flap of the cornea, thus keeping the edges of the incision in contact. There is this objection to it, however, that when adhesion of the iris does occur, the pupil is drawn upwards, and is not so favorably situated as when it is either central or drawn downwards, for most objects of vision are below the horizontal plane passing through the axes of the eyes.

R., colored male, æt. 11, in good health.

*Disease.*—Congenital cataracts of both eyes of the usual white color. Pupils very sensitive to light. The eyes having never been fixed upon objects, have acquired a constant vibratory motion.

*Operation.*—Believing them to be soft, lenticular cataracts, determined on the anterior operation for solution. Both pupils being well dilated by belladonna, punctured the cornea of one eye near the outer margin with a Jacobs' needle, carried its point to the lens and lacerated its capsule. Immediately the aqueous humor became turbid from the discharge of the fluid contents of the capsule. The needle was then withdrawn, and was followed by a spurt of aqueous humor through the puncture. The same operation was performed on the other eye with the same results. After waiting a few minutes, again examined the eyes and found that the aqueous humor of one of them had become almost perfectly clear. The morbid contents of the capsule had been rapidly precipitated. During the next ten days the patient was confined to a darkened room and restricted to antiphlogistic regimen. Light was admitted into the room, but the bandages retained upon the eyes. On the following day the bandages were removed. The pupils were found to be perfectly clear and not an opaque particle was to be seen floating in the aqueous humor. The punctures of the cornea were marked by small feint white spots entirely out of the range of vision, and no inflammation whatever was perceptible at these points or any other part of the eyes.

The patient can perceive objects but with very great indistinctness, and eagerly attempts to feel them in order to obtain

correct impressions; and by this mode of education, his vision appears to be capable of great improvement.

Four weeks after the operation, the eyes continue clear and healthy. Dilatation of the pupils enables one to discover a few opaque particles, but neither of sufficient size nor in such position as to interfere with vision. The vibratory motion of the eyes continues, but they appear to be capable of being fixed upon an object for a longer period than at first. On account of this motion, it is impossible to ascertain satisfactorily to what extent vision would be benefited by glasses.

It is unfortunate that the operation has been delayed so long. This vibratory motion will probably never be entirely remedied, and the retinae will probably never acquire their full power in consequence of such long disuse having induced a partially paralyzed condition, or what is probably a more correct explanation of the obscurity of vision, his eyes now remain in nearly the same condition in which they were at birth. They have undergone the organic changes of growth, together with the rest of the system, but the nervous power of the retinae is probably in the feeble condition of that of the foetus at birth. He forms a correct judgment of the position of objects within short distances, and has learned to distinguish a few objects correctly.

Determined to send the patient back to the country and let him exercise his eyes for three or four months, and then to try glasses.

It is very remarkable with what accuracy he distinguishes black, white and red colors, with this exception, that all bright objects or very light shades he calls white, and all dark shades he calls black. These impressions, however, are precisely such as might have been expected in one unaccustomed to colors.

Having pretty fully described the operation and discussed its advantages, it is unnecessary to add anything further here, except that the results of this case fully confirm the favorable opinion of the operation expressed on that occasion. B.

## A Case of Production of Insects in the Anterior Chamber of the Eye.

BY R. HICKS, M. D., NORTH CAROLINA.

Miss P., aged 18 years, of sound health, and of fine size and constitution, enjoying from birth uninterrupted health, in June 1850 complained of violent irritation of her left eye. Upon examination, there was discovered a small insect about the size of a small pin, one line in length—its head tapering to a point, with a small black speck on the centre of it.

The insect possessed life, moving with activity over the thumb nail when laid upon it. About half an hour afterwards she again complained, and another was removed. She continued to complain until five were removed at regular intervals of half an hour—all possessing life. On the next morning at 8 o'clock, she made similar complaint, when another was removed. During the morning at regular intervals of half an hour, three were removed. In wiping the insects from the eye slight inflammation arose, or was supposed to be produced by the effort to remove them. Upon the subsidence of the inflammation a small white speck was observed in the centre of the pupil, which obscured the vision of the eye. The small speck remains to the present time, with no other inconvenience than an imperfection of vision—her health remaining as perfect as before the appearance of the small insects.

*Note.*—The reporter of the above case requests us to give in an appended note our views of these insects. On consulting authorities, we find that "it has been long well known that a species of filaria (thread worm) is occasionally found in the anterior chamber of the horse's eye." They were first observed in India, but subsequently in Europe and America, and have been found in other vertebralia.

These entozoon have also been found under the conjunctiva in the human subject. Dr. Nordman of Odessa has given a minute account of them. He calls this entozoon filaria oculi humani.

In relation to these parasites, Vogel uses the following language: "Whether these filariæ occur only in the human eye and form a distinct species, or whether, as seems to me more probable, they can also live elsewhere, must be decided by future researches. An explanation of their origin is at present impossible from want of experience, yet in elucidation of it, the circumstance that filariæ have also been found in the blood of living animals, appears to me to be important." W.

### Liability of Young Children to Mumps.

BY JOHN P. LITTLE, M. D.

In the last number of the *Stethoscope*, a correspondent, A, offers his experience, to show that children, before dentition, are liable to this disease.

Having received also from other sources similar statements, I consider it established, that young children may be attacked by mumps before dentition. Yet even these statements do not go to prove, that this occurrence is at all a common one.

A also states, "that the exemption of very young persons from susceptibility to the constitutional effects of mercury is owing to the *more rapid elimination* of the poison from the system of infants than from that of the adult." The fact is correct; the inference is a mistake. There is a more rapid elimination of mercury in an infant, owing to the greater proportional size and activity of the liver. Yet if mercury be improperly given, death may ensue in a young infant, from its accumulation in the system; and that death, caused by gangrene and sloughing of the mouth. The child will not be salivated, yet it will die from the mercurial poison. If the explanation, given in a former No. of this journal, be not correct, as to the cause of this nonsusceptibility of infants to salivation, viz: that the glands not being fully developed cannot be readily acted on, it must be considered as an unexplained peculiarity of the infantile constitution.

THE January number of the New Jersey Medical Reporter contains the opening of a correspondence between the late Dr. Pereira of London and Dr. Stephen W. Williams of Massachusetts. The latter gentleman supposes its publication "may be interesting to his professional brethren in an historical point of view, independent of some of the facts it may communicate. Some of these facts may not be as familiar to all of them as may seem desirable. An extended and reliable medical history of the United States of North America has not yet been published, even if it has been written. These letters may aid in preparing such a history during at least a portion of the time in which we have existed as a nation."

Dr. Williams' letter, in giving a "sketch of the state of medical affairs in the United States of America," contains the following paragraph, to which we invite attention. We *italicise* portions of it as being doubtless those "facts which are not as familiar to all as may seem desirable."

"We are doing something in the line of medical associations, though we have no national medical society. I have, however, had a correspondence with Dr. Coxe, Dr. J. V. C. Smith of Boston, Dr. Lee, and several other distinguished physicians, upon the subject, and hope the object may yet be accomplished. Each individual state is almost an independent sovereignty, and every state manages its own concerns, in relation to the subject of medicine, in its own way. Some states have laws regulating the practice of physic, and some have none. Those states which have laws upon the subject, require that the candidate for practice shall be examined by a board of censors, and if they approve of him, and find him qualified, they license him; if not, they reject him, and it is considered disgraceful for him to practice. Nor can he have the benefit of the law for collecting his debts. In some states he is fined twenty-five dollars for every offence of practicing without license. *The general requirements for license, are a de-*

*gree of Doctor of Medicine, from some of our respectable medical colleges. Before a person can receive that degree, he must be well acquainted with the Latin, and in some instances with the Greek language. He must have a good knowledge of mathematics and natural philosophy, or he must be prepared to enter some of our literary colleges, or he must actually have received the degree of A. B. from some of those colleges, before he can enter on the study of medicine."*

We also copy from the Buffalo Medical Journal the following extract from a critique on the able and scholarly report of Professor Cabell on medical education, made to the American Medical Association at its last meeting. We trust the veracious historian will reconcile the discrepancies contained in these extracts :

"The prolonged term of lectures has been a favorable theory of the reformists. The arguments in its favor are certainly solid. A large share of the profession will think with Dr. Cabell, that the collegiate course should be the essential part of medical teaching, and that private preceptorship should assume a minor importance.

"The difficulty here is in a want of concert among the schools. At first thought it would appear that those schools which are deriving heavy incomes from their pupils, should be the first to adopt the lengthened term, as they could best afford it. But it happens that no such disposition is manifested by them. They are content with their present position. If the income of a school is \$ 30,000 for a four months' course, it would be folly to work six months for the same money. This is the real position of the leading schools. They are fully aware that they cannot increase their fees, or extend their term, without a loss of students and money, and however earnestly the reform party may urge their really sound arguments, they are whistling down the wind. Of course the smaller schools must follow their lead. They are not able to make the sacrifice, or, if in a spirit of zeal they once do so, they are compelled, by the strong argument of money, to return to their original position.

“As to preliminary education, all seem to be agreed upon its importance. It should undoubtedly be made a requisite, but who shall make the necessary examination? We are told that it must be made before the entrance of the student in the office of his preceptor. But when preceptors neglect their duty, as happens in nine cases out of ten, who shall shut him out of the profession?”

“This pleasant duty is assigned to the colleges, and here rests the whole question. It is agreed on all hands that the colleges shall be the scape-goats—all the sins of the entire profession are to be laid upon them.

“Now we assume that the college has no right or duty to go behind the certificate of the preceptor. Colleges are usually very good-natured institutions, but to insist that they shall shoulder the whole responsibility of making good doctors of all the students—good, bad and indifferent—is a little too much for their long-suffering tempers. We know some capital teachers, men of the highest medical skill combined with great success in teaching, who would stumble very many times before they reached the gerund in conjugating the verb *amo*.”

Without further comment, we congratulate Dr. Williams that Dr. Pereira (after being duly informed that he, Dr. W., was a “professor and lecturer in four of our most respectable medical colleges in the United States,”) “CONDESCENDED” to a correspondence.

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### Bibliographical Notices.

*Nature in Disease, illustrated in various Discourses and Essays—to which are added Miscellaneous Writings, chiefly on Medical Subjects—by* JACOB BIGELOW, M. D., *Professor of Materia Medica in Harvard University, &c. &c.*

We have received this volume of miscellaneous papers, and append below a list of its contents. While it may be a readable book to a man that has nothing else to do, we have

searched in vain for any proper excuse beyond the vanity of the author, for giving these essays the durable form of a volume. We lay it aside as one of the products of that mania for book making now so rampant in every department of learning.

1. Self limited diseases.—2. Treatment of diseases.—3. Practical views on medical education.—4. Report on homœopathy.—5. Medical profession and quackery.—6. Gout and its treatment.—7. Treatment of injuries occasioned by fire and heated substances.—8. Burial of the dead and the cemetery of Mt. Auburn.—9. Remarks and experiments on pneumothorax.—10. Pharmacopeia of the United States.—11. *Mucuna pruriens*, with remarks on the instability of different tissues.—12. Poisonous effects of the American partridge.—13. Coffee and tea and their medicinal effects.—14. Report on action of cochituate water on lead pipes.—15. History and use of tobacco.—16. Early history of medicine.—17. An address delivered before the American academy of arts and sciences in 1852.

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*The Construction, Organization and General Arrangements of Hospitals for the Insane*—by THOS. S. KIRKBRIDE, M. D.,  
*Physician of the Pennsylvania Hospital for the Insane.*

We have perused this valuable work. To make state provision for this large class of unfortunates, seems now to be conceded to the demands of humanity and civilization.

Dr. Kirkbride's book contains all those details, which will insure adaptation to the end, and success to the general management of hospitals for the insane. To his volume are also appended the recommendations of the "association of medical superintendants of American institutions for the insane" on the same subjects.

The entire volume bears the marks of that pains-taking diligence and earnest devotion, which is the true secret of Dr. K.'s eminent success in the cure and treatment of the insane. We confidently commend the work to such as desire information on the subjects of which it treats.

### Case of Gun-shot Wound of the Head---Death three and a half months thereafter.

BY E. D. CONE, M. D., HILLSDALE, MICH.

May 30th, 1854, was requested to see Mr. A——, aged about 30, sanguine, bilious temperament, of regular habits, and a cooper by trade, who was reported to have been shot by Mr. ——, and supposed to be dying.

Accompanied by my friend, Dr. J. P. Randall, I repaired to his boarding-house, to which he had been conveyed in a state of unconsciousness.

On seeing the patient, it was found that his face and forehead were blown full of powder, and that there was a considerable swelling and echymosis of the upper lid of the left eye; and upon close examination it was observed that the ball (about the size of a buck shot,) fired from a small pistol, had entered between the lids at the *inner canthus* of the left eye. We succeeded in passing a probe directly backwards about half an inch, and from thence, by curving it, obliquely, upwards and inwards about two inches, until the ball was distinctly felt, resting on or near the upper surface of the ethmoidal bone. In passing the probe fresh blood issued from the mouth and nostrils. From the oblique direction the ball had taken, and the nature of the parts through which it had passed, it was deemed impracticable to attempt its extraction; the result therefore was left to nature. In about two weeks, by the use of cold applied to the head, and the exhibition of cathartics, alteratives, and diaphoretics, low diet, &c., he so far recovered as to be enabled to walk about the streets; but soon thereafter, on resuming labor at his occupation, he was suddenly seized with violent pain in the head, together with all the symptoms of inflammation of the brain, which however readily subsided by using treatment therefor, and he was soon able to be about again. I may remark that he had repeated attacks of symptoms of inflammation of the brain, always induced by attempting to labor at his trade, but which yielded to treatment, until the evening of the 17th of September following, when he succumbed to a similar attack about eleven o'clock.

Autopsy on the 19th. At the request of the prosecuting attorney, and accompanied by my friends, Dr. A. Cressey and Mr. A. Whelan, I proceeded to make an examination of the body. After removing the calvarium, the brain was found to be highly congested, the anterior lobes softened, underneath which, and resting on the os ethmoides, was found the ball

very much flattened, together with several fragments of bone, the longest of which was about half an inch square, but oval in shape. The ball and fragments were enveloped in about two ounces of greenish pus. The dura matter in the vicinity of the ball had ulcerated.

The points of interest about this case I consider to be, the length of time he survived after the reception of the injury, the repeated attacks of inflammation of the brain and its members which so readily yielded to treatment; and the amount of pus that had collected without sooner producing more marked symptoms thereof, especially as the ball and fragments of bone were in close contact to the brain as foreign substance. I may remark that he continually complained of a *dull, heavy pain in the region of the ball* during the intervals of his attacks, at which times it would become *excruciatingly severe*, with great external heat, &c. &c.

Although disconnected with the surgical interest of the case, I may observe, that the affray occurred in consequence of jealousy, (as is believed,) and that although the perpetrator claimed it to have been an accident, yet he was indicted for murder, and upon trial was convicted thereof and sentenced to the states prison.—*Peninsular Jour. of Med.*

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### A New Broth for the Sick.

BY JUSTUS LIEBIG.

To prepare this broth half a pound of the flesh of a recently killed animal (beef, or the flesh of a fowl) is chopped fine, and well mixed with a pound and an eighth of distilled water, to which four drops of pure muriatic acid, and from half to a drachm of common salt, have been added. After an hour, the whole is thrown on a common hair sieve, and the fluid is allowed to run off without pressure. The first portion, which is turbid, is poured back, until the fluid runs off quite clear. On to the fleshy residue in the sieve half a pound of distilled water is thrown in small portions. In this way a pound of fluid (cold extract of meat) is obtained, of a red color, and an agreeable taste of broth. The sick are allowed to drink a cupful cold at pleasure. It must not be heated, as it then becomes turbid, and deposits a thick coagulum of animal albumen and hematine.

The sickness of a young female servant from typhus in my

house gave occasion to this preparation. It was called forth by a remark of my medical attendant, that, in certain conditions of this disease, the greatest difficulty which presented itself to the physician lies in an imperfect digestion—a consequence of a condition of the intestines, and the difficulty of obtaining food suitable for digestion and the formation of blood. Generally broth prepared by boiling is deficient in all those ingredients of meat which are necessary for the formation of the albumen of the blood, and the yolk of an egg which is added is very poor in this substance, as it contains in the whole  $82\frac{1}{2}$  per cent. of water, and  $17\frac{1}{2}$  per cent. of egg-albumen, or a substance analogous to it, and whether this substance in its nutritive qualities is equal to the albumen of flesh is, according to the investigations of Magendie, at least doubtful. Besides the flesh albumen the new broth contains a certain quantity of hematine, and therein a large quantity of iron necessary for the formation of blood corpuscles, and, lastly, the muriatic acid for its digestion. A great hindrance to the employment of this broth in summer is its changeableness in hot weather. It undergoes fermentation, as sugar with yeast, without giving a disagreeable odor. What substance causes this change it is very desirable to ascertain. On that account the flesh must be treated with very cold water in a cold place. Ice water and cooling with ice remove this difficulty. But, above all things, care must be observed that the flesh is used fresh, and not several days old. In the hospitals of Munich and in private practice this broth has been employed with great advantage.

*Annalen der Chemie and Annals of Pharmacy.*

We would suppose the difficulty in using this broth would be in inducing your patient to drink it. L.

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### **Treatment of Tenia by the Seeds of Cucurbita Pepo, Pumpkin Seed.**

The seed of the pumpkin, a highly valued remedy of tapeworm, and one that has been the most fully tested, though not discovered by Americans, seems to be altogether ignored by American compilers of Dispensatories and Formularies.

The pumpkin seed remedy is often mentioned as being a new one, and as having been first introduced into practice in America. It appears, however, that this article was first in-

roduced to the notice of the medical world by Dr. Mongeney of Bordeaux, about three years ago, at a meeting of the medical society of that city; he then and there declared that for thirty years he had used with great success for the expulsion of tænia, a paste of pumpkin seed, (*la pate de citrouille*;) 90 grammes of fresh seed mixed with twice as much honey—a dose which in seven hours, without producing any unpleasant effect, dislodged the worm. Dr. M.'s confreres of that city, among whom were MM. Brunet, Sarramea and others, had in a great many instances used this article with the most complete success—some of whom gave 45 grammes of the skinned seed (*semences depouillees*) united with the same amount of sugar. One of the physicians, who had suffered extremely for two years, from an almost constant pain in the lumbar region, excessive debility, indigestion—symptoms which he regarded as due to a disease of his nervous system. He finally, having voided some flattened fragments which he thought might be portions of tænia, took by the advice of M. Sarramea, 30 grammes of pumpkin seed pounded with 10 grammes of sugar; he suffered all night from a violent fever and great agitation; by morning, twelve hours after having taken this dose, an injection simply of water brought away seven metres, or about twenty-three feet of tænia.

As suggested by M. Rollet, measures were taken to convey to the council of the administration, a recommendation that this valuable remedy should be admitted into the pharmacopœia, (*codex*.) (See *Jour. des Connais. Med. Chir.*, June 1, 1852.)

*Cure for the Tapeworm.*—Procure sufficient seed of the pumpkin (those grown in the West Indies are the best) to make two ounces after removing the outside shell of the seed; put them into a mortar and add half a pint of water; pound them well up, and make a liquid orgeat of them, which strain through a cloth. Drink this mixture in the morning on a fasting stomach. If it does not operate in the course of an hour and a half, take one ounce of castor oil. Drink all the time as much fresh cool water as the stomach can bear or contain; that is, drench yourself with water. After taking the orgeat, if the stomach is well rubbed with ether, and an injection of about sixty drops of it is taken, you will find it an assistant to the orgeat, but this may not be necessary. Should the first application of the remedy not answer, repeat it the next morning, and there is no doubt your complaint will be removed. The worm will leave the patient all at once, and probably entire. This can be ascertained by finding the small end or head of it, which tapers almost to a point.

The New York friend, from whom I received the recipe, of which the preceding is a copy, in March 1848, remarks, in support of the efficacy of this remedy, that Capt. — says he did not have to take the injection, although he took two separate doses of the seed, (the first not operating sufficiently,) which relieved him at once, and since which time has cured probably a dozen different persons afflicted with the tapeworm, who had been given over by the physicians. The worm from him was about thirty-four feet long, and each link about one inch. He rubbed the stomach with ether after taking the orgeat. It may be advisable to use the forenamed remedy under the advice and with the assistance of a physician. I have only to add that the suffering lady in this city, for whose relief the writer's aid and influence was solicited by her husband, has been restored to perfect health, after years of prostration and efforts for relief; and in thankfulness for the interest I had manifested in the case, sent me a glass jar containing a large part, if not the whole of the worm that had been her tormentor for several years.—*Boston Med. and Sur. Journal.*

F. W. Cragin, M. D., says: "On reading an article on pumpkin seeds, in a late number of the Boston Medical and Surgical Journal, I recommended it to an intimate friend, who had, two months before, discharged about four yards of that detested parasite, a tapeworm, and who was sure there was "more of the same sort left." He in three days afterwards showed me the bottle, since left at your office, containing what was formerly discharged, together with the tapering part of that which was removed (in all about four yards) by the remedy.

His statements, which may be implicitly relied on, are, that for want of West Indian or other pumpkin seeds, he took undried acorn or marrow squash seeds, and proceeded, *secundum artem*, following the orgeat, in about one hour and a half, with about six drachms of castor oil, taken in two spoonfuls of Holland gin. He drank very little water twice; drank and ate nothing else till noon, when the only effect of his faith and practice was manifested "in one liquid discharge containing the squirming worm; at one end about one-third of an inch broad, and tapering down to nothing."

If this remedy should continue to prove as efficacious as in this and former instances, it is to be hoped a specific has been found for one or more of "the ills that flesh is heir to;" which remedy should never be lost sight of.—*Id.*

*On the Treatment of Tapeworm by the Oil of Pumpkin Seeds:* By the late Prof. HENRY S. PATTERSON, M. D.—In the

Medical Examiner for October 1852, I reported a case of radical cure of tænia, by the use of an emulsion of pumpkin seeds, after the ol. terebinth, and even kousso, had signally failed. Several other cases have been reported before and since mine, all going to establish the efficacy of this new remedy. Should it prove as generally successful in expelling the worm as the cases indicate, it will become a valuable accession to our means of treatment in a troublesome and often obstinate affection.

The seeds of the common pumpkin (*cucurbita pepo*,) consist of a leathery white envelop, inclosing an oily albumen of a slightly greenish tinge. They are inodorous, and have a sweetish, mucilaginous taste. Rubbed up with warm water or milk, and sweetened, they form a very pleasant emulsion; and this is the way in which they have generally been administered. They abound in fixed oil, which is readily yielded on expression, and appears to be the only constituent of any importance. Conceiving this oil to be the anthelmintic principle, I determined to use it in the first case of tænia I should encounter. A quantity was obtained, by cold expression, by our accomplished pharmacist, Mr. Frederick L. John of Race street. From four lbs. of the seeds he procured  $\frac{3}{4}$  xiv. of oil; but he has no doubt that, if the operation were conducted on a larger scale and more carefully, the yield would be from thirty to forty per cent. The oil is clear, transparent, of a light brownish green color, with a slight oily odor, and a perfectly bland taste, like that of the oil of sweet almonds. It has now been kept some ten months, in well stoppered bottles, and is perfectly sweet and bland.

No case of tænia has occurred in my own practice; but in May last I learned from Mr. John C. Lyons, an intelligent member of the medical class of Pennsylvania College, that a poor woman in his neighborhood (Kensington) labored under the disease, and had asked his advice. I requested him to use the pumpkin seed oil, which he did, with the happiest results. Causing her to fast rigidly for twenty-four hours, he gave her  $\frac{3}{4}$  ss. of the oil in the morning, and in about two hours  $\frac{3}{4}$  ss. more. This produced a slight disposition to looseness of the bowels. In two hours after the last dose,  $\frac{3}{4}$  i. of castor oil was given, and purged freely, bringing away a considerable portion of the worm. From that period until the present, (September) she has remained entirely free from any symptom of verminous irritation, and there can be no doubt that the worm was altogether destroyed.

Tænia is of so rare occurrence with us, that no individual practitioner sees enough of it to enable him alone fairly to

test any medicine. I therefore beg leave to call the attention of my medical brethren to a remedy readily obtained, cheap and pleasant, and which I believe will be found quite efficient.

The same gentleman reported the following case :

*Failure of Koussou—Successful Use of Pumpkin Seeds.*—The subject of this case was for some time under my care, in consultation with my colleague, Dr. Darrach. I can aver that he was most thoroughly put through the entire routine of tapeworm remedies before he left Philadelphia. He tells his own story so well that I prefer to give the following extract from a letter announcing his restoration to health : “ In the early part of January 1836, I was rather suddenly attacked with what seemed to be an alarming diarrhœa, which continued for some weeks, resisting the usual remedies. My symptoms had been peculiar for some time previous to the attack. Indeed, I had all the prominent symptoms of *tænia* as laid down in the books, viz : dizziness ; occasional false vision ; variable appetite ; pain in the lumbar region ; pain in the knee joint ; swelling of the abdomen ; hesitancy of speech ; restlessness in time of sleep ; unusual drowsiness during the day ; variable strength, being sometimes quite strong, and then again quite feeble. Somewhere about the middle of February of the same year, I discharged at a morning stool, about nine yards of the *tænia*. From that time onward, for six years, I was more or less under medical treatment continuously. I took large quantities of the spts. turpentine, (once or twice two ounces at a dose ; ) also, the male fern, calomel, and jalap, and Jayne’s vermifuge ; and was several times under homœopathic treatment. I took also iodide of potassium, iodide of iron, decoction of pomegranate, and the ‘ koussou.’ I discharged large quantities of the worm, but no head could be perceived. When the koussou failed, I began to despair of being cured at all, but my sister, Mrs. —, sent me in December last two numbers of the Boston Medical and Surgical Journal, containing two several accounts of the cure of *tænia* by the use of pumpkin seeds. Having previously abstained from usual food for a day, on the 10th of January last, I took, at 8 o’clock in the morning, two ounces of the kernels of pumpkin seeds pulverized with two tablespoonsful of white sugar, and commingled with a half pint of boiling water, making a very pleasant drink for a fasting man. I kept my bed, drinking frequently of cold water, and at 9½ o’clock, I took an ounce of castor oil. At 10½, I drank a cup of hot black tea, and, in about two minutes discharged about eight yards of the tapeworm, *with the head*. O, how I wept for joy

that I was again a free man, after a servitude of six sad years to this awful complaint. Since then I feel like a new being in a new world. My life had often been a weary burden, and yet I grew fleshy and looked healthful. For months in succession I had discharged the worm daily in pieces of six to eighteen inches, and also in gourd seed form. I suppose that without any over estimate, I discharged, during the six years of my affliction, about *four hundred yards!* The remedy is very simple. Were I a practicing physician, I would never administer turpentine for tapeworm; I sometimes fear that I have experienced irretrievable harm to my kidneys by using it. There is virtue in pumpkin seeds, doctor, even if it be a *Yankee notion.*"

In the Northwestern Medical Journal for May 1853, Dr. J. McCreary Sudduth gives the following case:

B. H., male, aged 28 years—occupation farmer, volunteered in 1847 to go to Mexico. In good health when he left home (Ky.) Sickened while on the gulf, Nov. '47. Landed and went as far as the city of Mexico. Discharged and returned to Kentucky early in the summer of 1848, quite weak and much emaciated. In August of 1848 began to pass by stool small portions of what proved afterwards to be joints of tapeworm. Shortly after his return to Kentucky, he applied to a number of physicians for advice; receiving no benefit from any article recommended, except those used by one doctor whose prescription brought away eight feet of tapeworm. Patient thinks the articles used by him were cal. and Dr. Jayne's vermifuge. Shortly after passing this piece of worm, finding himself not relieved, and knowing now what it was that troubled him, he went to Louisville and consulted a number of physicians of that place, offering one hundred dollars to any one who would rid him of his troublesome companion. He however received no benefit from any articles used by physicians of that place. Soon after leaving Louisville, he came to Illinois, still poor and in bad health. He consulted with all the doctors that came in his way, using all articles by them recommended, as well as all the patent medicines that he saw extolled for the removal of tapeworm, (and their name is legion) in newspapers, almanacs and receipt books, &c.; however all failed. When he consulted Dr. Smick and myself, he presented the appearance and symptoms as follows: Was lean in flesh and ænemic, judging from the appearance of *the surface* and color of his lips. Abdomen somewhat distended, troubled much and especially at night by a moving, creeping sensation in the abdomen. Variable appetite, at times voracious, at others none at all, passing daily by stool a

number of joints of the worm. We advised him to eat the paste of pumpkin seed and honey,  $\bar{z}$  iij, one ounce at a time, with an interval of two hours. Six hours after taking the last portion he passed twenty-two feet of the worm, though in three pieces, the longest of which was eighteen feet, and bearing the head of the parasite; showing the superiority of paste of pumpkin seed and honey over all known articles for the removal of this troublesome, if not destructive parasite. All symptoms of worms have disappeared.

In the American Journal of the Medical Sciences for July 1854, D. Leasure, M. D., of Newcastle, Pa., says: "Mary —, aged twenty-eight, unmarried, has been delicate all her life, and for fifteen years subject to severe cramping pains of the abdomen, accompanied sometimes with obstinate vomiting. About ten years since, she noticed that she passed portions of tapeworm, of lengths varying from a single joint up to many feet, and if the statements of the patient and her mother are to be relied on, sometimes half filling an ordinary chamber mug. Her mother had also, at an early period of her life, been a victim to a tapeworm, which had been expelled by a secret *vegetable remedy*, probably *male fern*, given to her by a worm doctor.

My attention was called to Mary's case some time in last February, while in attendance on her sister, for another disease; but from causes unnecessary to mention, I did not prescribe till last week. I had intended to use the male fern or kousso, or both; but not having access to either of them in a fresh state, I determined to wait till they could be procured from Philadelphia. While thus waiting, I noticed in one of the journals a report of a case of *tænia* expelled by the use of emulsion of pumpkin seeds. Curiosity, more than the expectation of success, prompted me to give it a trial. I directed a pint of the bruised seeds to be infused in three pints of soft boiling water, and left over night, the whole to be taken during the next day, the patient fasting in the mean time.

On the morning of the 9th of May the patient commenced its use, and in the afternoon experienced the most violent cramps and pains in the bowels for several hours; and on the morning of the 10th, she passed eleven feet of the parasite, including the head, as proved by observation under the microscope. The animal was entirely dead when voided from the bowel, and is a most beautiful specimen of a perfect *tænia*.

*N. O. Med. & Sur. Journal.*

**Braun on Eclampsia during Pregnancy.**

This author has recently published a lengthy paper on the above interesting subject, of which the following is a very brief abstract:

1st. Convulsions may arise, during this period, from hysteria, epilepsy, cerebral diseases, poisons, uraemia—resulting from Bright's disease.

2d. Their most common causes are uraemia and Bright's disease.

3d. The least frequent causes are primary cerebral diseases; and when these occur in connection with albuminous nephritis, they are the *results*, not the causes, of the convulsions.

4th. Hysteria and epilepsy may exist, during gestation, in a chronic form, so as to exercise no injurious influence either on pregnancy or labor, or on the life of the child; and they may be quite unconnected with Bright's disease.

5th. Convulsions in every form may occur from these causes in the unimpregnated female; and also in men, from all of them, except hysteria.

6th. The altered constitution of the blood, and the detention of the venous blood in the kidneys by the pressure of the enlarged uterus, are most commonly the causes of the morbis brightii, which occur during pregnancy.

7th. Convulsions are caused by the urea, which is uneliminated from the blood on account of the renal disease, becoming changed into the carbonate of ammonia.

8th. When, in cases of Bright's disease during pregnancy, we find carbonate of ammonia in the blood, we may prognosticate the occurrence of convulsions; but when, at this time, the urea in the blood exists merely in small quantities, or chemically unchanged, we need not dread eclampsia.

9th. Parturition and uterine irritation neither cause this chemical transformation, nor occasion uraemic eclampsia.

10th. The abortions which so frequently happen during uraemic convulsions, are the results, not the causes of the eclampsia.

11th. There is no connection between eclampsia and labor pains.

12th. Albuminuria does not result from convulsions arising from functional interruptions, and does not generally occur in those of an epileptical and hysterical character.

13th. Albuminuria continues throughout pregnancy, although the eclampsia attacks may have ceased; but when

convulsions cease *after labor*, it soon disappears, provided the renal disease be only in the incipient stage.

14th. The disappearance of the albuminuria after parturition, is principally due to the diminished volume of the uterus.

15th. Morbus brightii (without convulsion) may be palliated but not removed, during pregnancy, although it readily yields to remedies after parturition.

16th. Albuminuria occurs in all cases of eclampsia which do not depend upon hysteria, epilepsy, primary cerebral diseases, or poisons.

17th. Epileptic convulsions may occur simultaneously with those from Bright's disease and uraemia.

18th. Uraemic convulsions, when frequently recurring, occasion the death of the foetus; but its life is not endangered by those from hysteria or epilepsy.

19th. During an attack of uraemic eclampsia, reflex sensibility is almost wholly suspended; and after it we oftener find œdema and anæmia of the brain, than hyperæmia and consecutive apoplexy before it.

20th. Venesection (according to Kiwisch, Litzman, Sedgwick, Blot, and Kink) is injurious in eclampsia; and the author has found its action very uncertain in uraemia. He considers inhalations of chloroform to be the best and safest means we possess for subduing and removing uraemic convulsions, both during pregnancy and after labor.

21st. The most certain diuretics for removing the uraemia of Bright's disease are the benzoic, tartaric and citric acids.

22d. The artificial induction of premature labor diminishes the danger of uraemic eclampsia alike to the mother and child; but this practice should not be universally resorted to in cases of Bright's disease during pregnancy, but only when necessitated by the occurrence of convulsions. Braun considers the tampon as the best method for its induction when necessary.

[The editor of the Monthly Journal remarks: The treatment here proposed appears to us by no means universally applicable. Where the convulsions occur during pregnancy, or in an anæmic patient, or where, as happens in infantile eclampsia, they depend rather upon a superpolarity of the cerebro-spinal system than on actual toxæmia, we consider the inhalation of chloroform as unquestionably the best treatment for arresting the paroxysms. But when, on the other hand, they occur during parturition, or in the puerperal state, in a robust, plethoric patient, we should be inclined, from all we have seen of the disease, to place more confidence in copious venesection, smart purgatives, and cold to the head.]

Moreover, for the induction of premature labor in such cases, we should be inclined to prefer the use of sponge-tents and uterine douches to the clumsier method of the tampon ] *Edinburgh Journ. Med. Science.*

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### Glasgow Medico-Chirurgical Society.

Dr. Wilson, the president, introduced a discussion on uterine hæmorrhage, by detailing a case of placenta prævia, to which he had been called a few days ago, in consultation, and in which the vagina had been plugged before his arrival, with the view of arresting the flooding, which was considerable. He removed the plug, and found that the uterus had become gradually distended with blood. He introduced his hand, and soon completed delivery by turning. The patient was doing well.\* He gave it as his opinion, that, in most cases of this kind, it is better to allow the blood to flow from the vagina, than to use a plug, because the exact state of the case can then be known, while it is not unusual for the blood to continue flowing when the vagina is stuffed, and in these circumstances an immense mass of blood may collect in the vagina and uterus. This he had seen in several cases. When the quantity of blood becomes alarming, or even before this, we should, without waiting till the os tincæ becomes very dilatable, proceed at once to effect delivery by gradually causing dilatation by the introduction of the hand. Some of these cases may be lost by delaying too long, in expectation of the natural efforts being sufficient to effect dilatation; but when we have reason to suspect that a great deal of blood may be lost before the os has sufficiently relaxed, we should not hesitate at once to have recourse to artificial delivery.

Dr. J. G. Fleming lately met with a case of placental presentation, in which the vagina was firmly plugged, the hæmorrhage being considerable, and the os uteri firm, and very slightly dilated. An immense quantity of blood certainly collected in the uterus. Still he was not sure if it was right to condemn altogether the use of the plug; at an early stage of labor, when the detachment of the placenta is small, and the os uteri firm and little dilated, he thought that the introduction of a plug was useful; there would not be so much

\* Dr. Wilson has since learned that this patient died of phlebitis about three weeks after delivery.

danger of further flooding, in consequence of the pressure exerted on the detached piece of placenta.

Dr. MacEwan had seen cases of the kind. He alluded to some instances of relaxation of the uterus after delivery, in which the organ lay loose and flaccid, and even the introduction of the hand failed to produce contraction. These cases should be carefully watched; but, strange to say, hæmorrhage was not so usual as might, under the circumstances, be anticipated.

Dr. Bell mentioned a case of flooding after delivery, which he had noticed not unfrequently, and which he described as a patulous and relaxed condition of the *cervix* and lower part of the uterus. This, he believed, might often be found even when the fundus had become quite contracted. He considered it necessary, before leaving any case of labor, to make a vaginal examination, in order to ascertain the state of these parts, as the feeling communicated to the hand placed on the abdomen might be fallacious, and would, in cases of this sort, give no indication of the risk of hæmorrhage. This generally appears at first as a mere trickling from the vagina, in which, however, clots are soon formed, and so plug it up as to prevent an external flow of blood, which, however, accumulates internally, distending the uterus, before the general symptoms of flooding make their appearance. He considered that many cases of internal uterine hæmorrhage originated in this somewhat insidious manner.

Dr. R. G. Maxwell said he had met with three cases of presenting placenta, in which it was necessary to turn the child. The *os uteri* was so far relaxed in all of them before he made the attempt, that he was enabled, with moderate persistence, to pass his hand safely beyond it, and turn with ease. All the women had good recoveries; the children were dead—two of them had been so several days. Two of the cases were premature—one at 6½, the other at 8 months. In such cases the patient requires to be watched, and care taken that she does not lose so much blood as to endanger life before an attempt be made to turn. We may suspect internal hæmorrhage after delivery if the woman begins to yawn, and shows other symptoms of approaching syncope. On placing the hand on the lower part of the belly, if we find a large soft tumor, we should immediately insert our hand into the uterus, remove all the clots of blood, and endeavor to produce contraction at the fundus.

Dr. James Watson agreed with Dr. Fleming, that there were some cases in which we might employ a plug, especially at the commencement of labor, and until the *os* had somewhat

yielded; but that whenever symptoms called for it, turning should at once be performed. As hæmorrhage from placenta prævia often occurred long before it was possible to dilate the os uteri with safety, the plug was, in such cases; indispensable; but where the hæmorrhage took place in circumstances admitting of such interference, immediate delivery was, in his opinion, as a general rule, the proper practice. The last case of the kind he had, profuse hæmorrhage occurred two months before the patient was actually delivered; he used the plug, but after some days discontinued it. The patient was kept in bed all that time, without being permitted almost to move a hand or foot, and was most carefully watched. She did not lose much more blood till the time of her actual confinement. Then it did return, and he immediately delivered her. The plug was not used after the first attack. She recovered without a fault.

Mr. Lyon said, observation had taught him that the error of practitioners was the postponement of interference; trusting to hope in place of acting, until exhaustion became dangerous, and interference only hastened death. Whenever manual delivery was at all likely to be required, the earliest possible interference, consistent with prudence, was the safest rule. He knew, from a recent conversation on the subject in the old medical society, he was supported on this point by the deservedly high authority of Dr. James Wilson. To the various species of hæmorrhage mentioned by the various speakers, he added that from laceration inside of the fourchette. He had seen an instance of this kind where the bleeding continued for hours, seriously exhausting the patient; and the true source of which he was led to discover from the blood *trickling*, not *gushing*; when ligature of the open mouth of the artery in a trivial lesion inside of the fourchette soon righted matters.

Dr. Ritchie, being in the chair, (Dr. Wilson having been obliged to leave the meeting some time before,) summed up as follows: The remarks of the different speakers appear to me to have embraced all the ordinary varieties of puerperal uterine hæmorrhage which are known, and one which I do not remember to have heard of before—that, namely, mentioned by Mr. Lyon, where a considerable bleeding was maintained, after the delivery of the child, from a lacerated artery in the situation of the fourchette. With bleeding from the rupture of a varicose vein in the labium I am acquainted, but not with that from an artery. Of the forms of uterine hæmorrhage arising from a separation of the placenta, before the birth of the child, reference has been made to cases in which the insertion of the placenta over the orifice was nearly com-

plete, and to those in which it was partial only; and of bleeding after delivery, examples have been spoken of, in which it occurred from irregular contraction of a portion of the body of the uterus on the retained placenta, or after the expulsion of the after birth, on a clot, or on some still attached membranes; and also of hæmorrhage taking place, with a firmly contracted fundus uteri, from relaxation of the orifice and neck of the organ.

In regard to the first form, or that where the bleeding appears in the latter months of pregnancy, from the necessary expansion of the orifice of the womb, the great practical difficulty is to determine the proper time to deliver. When the bleeding commences weeks before the natural period of parturition, is frequently repeated in moderate quantity, and your patient resides at a distance from you, and is not in labor, it is really not easy to decide. I am sure of this however, that should you resolve to delay, it is an unsafe practice to employ the plug. I have known death ensue from its use in such an emergency, a huge layer of clot being found, on inspection, between the uterus and the membranes. But, on the other hand, in a case in which delivery was resolved on, I have seen the child lost, on having been turned, from the powerful contraction of the circle of the orifice of the womb on its neck. I attributed this to the necessity of interfering early, although certainly the safe practice for the mother in every such condition is to do so. Let her be kept cool and quiet; use no means which will prevent you knowing the full extent of the bleeding; and deliver, whatever the state of the os uteri, whenever the strength of the mother begins to be obviously compromised. It will be needful, besides paying due attention to every other step of this operation, to dilate the orifice as largely as possible before you rupture the membranes. Of the second form of bleeding which has been mentioned, that where the insertion of the placenta is partial, the cases will always do well by our merely rupturing the membranes.

As to the instances of bleeding which happen after delivery, along with the irregular contraction of the womb, they commonly happen in hysterical women; and while one of the horns of the uterus is firmly clenched, its body is so relaxed that your hand passes with freedom as far upwards as the epigastrium. Such cases usually recover after the prudent extraction of whatever may have been retained; and it is a singular fact connected with them, that the bleeding which happens bears no proportion in quantity to the relaxation and flaccidity of the uterus.

With reference to the examples of bleeding after delivery,

from relaxation of the neck of the uterus, which are met with along with a firmly contracted fundus uteri in the hypogastrium, they have been frequent in my practice, and are worthy of much attention. I have known practitioners, deceived by the hardness of the uterus, and the paleness of the discharge in this condition, leave their patients, as they supposed, quite well, and be summoned soon afterwards to see them suffering from extreme exhaustion, and even dying without the external loss of blood; and other women, in like circumstances, after faintness, &c., sometimes expel a large mass of clotted blood in the absence of the medical man. I am more solicitous about this kind of uterine hæmorrhage in my own practice than about any other; and besides allowing the whole transit of the child and secundines to be accomplished by the mother, and then ascertaining the degree of contraction of the os uteri, I am in the habit of deferring the application of the bandage to the mother till the child has been dressed, and of retaining my hand in the mean while on the hypogastrium, and a cloth, accurately applied, to the pudendum. By these means the mother regains her strength, and I ascertain whether the uterus is in a doughy or contracted state, and whether stationary above the pubis, or rising at intervals above the umbilicus; the loss of every drop of blood also can be accurately measured, especially if the patient be kept on her side, and I am ready, without any hindrance from the newly adjusted clothes of the woman, to interpose my aid when required. Now, in many cases, at least in the more delicate nervous women of large towns, even when these precautions are observed, you will be surprised by finding that, while the uterus in the hypogastrium continues firm and small, the cloths at the vulva are soaked with a rose colored watery discharge, without any blood. This is sometimes profuse; and when it continues, the patient becomes dissatisfied, uncomfortable and fidgety; and should she be neglected, exhaustion, accompanied by pain in the belly or back, jactitation, fainting, and death even may ensue. The explanation of all this is, that oozing from the vessels of the os uteri has occurred, and given rise to the formation of clot, which, while it gradually expands the cervix and vagina, also induces increasing discharge from the uterine vessels; and there is no safety to the woman but in the expulsion of the coagulum, either spontaneously or by the cautious introduction of the hand into the uterus. The necessity of a cool atmosphere and a moderate allowance only of bedclothes, in the prevention and removal of this state, is also indispensable.—*Glasgow Medical Journal.*

### Clinical Lecture on Fever.

BY WILLIAM STOKES, M. D. (DUBLIN.)

In speaking of the affections of the mucous membranes in fever, we said nothing with respect to lesions of the larynx or trachea as the result of the essential disease. Taken as a localized disease, I would say, that this lesion is not very commonly met with; and we may safely hold, that it is by no means so frequent in the petechial fever of these countries as it appears to be in the so called typhoid fevers of the continent. This is the condition to which Rokitansky has given the name of the laryngo-typhus, by which he means a secondary lesion of the mucous membrane of the larynx and trachea, analogous to that of the bronchial membrane. It is, then, a secondary affection of the fever developed in the wind-pipe, and either confined to that part, or, at all events, predominating in it. I think it highly probable, that, in most cases of this disease, there is more or less of an associated affection of the bronchial membrane. But, so far as the fever of this country is concerned, the converse of the proposition does not hold good; for we constantly see the most profound bronchial affection without tracheal or laryngeal symptoms. We have met a few cases which would answer to the description of Rokitansky's laryngo-typhus. A more proper name for this disease would clearly be, a typhous affection of the larynx. In those cases which we have seen, the symptoms were, loss of voice, or a certain degree of hoarseness; the cough very rarely, indeed, had the laryngeal character, and I do not remember any instance of stridor in connection with the other laryngeal symptoms. In some cases, the weakness or hoarseness of voice continued for a considerable time, and did not disappear until convalescence was far advanced. I have often thought, that, in these cases, the lesion of voice was to be attributed more to the weakness or paralysis of the laryngeal muscles than to any form of irritation or inflammation of the mucous surface. For, although we cannot bring any observations from dissection to throw light on this point, we may fairly believe that the laryngeal muscles are liable to be affected in typhus, just as the muscular fibres of the heart are found to be; and that the same process which causes a typhous deposit in the mucous surface may be repeated in the vocal muscles; and that a certain time must elapse before these organs recover their healthy condition. They may also be weakened quite independently of any structural change, just as we see

to occur in the heart ; for in this latter organ there are doubtless two forms of debility in connection with typhous fever—in the one we have weakness with distinct softening of structure ; in the other, a debility which appears to be purely nervous. This leads me further to draw your attention to the probable existence of similar conditions in the circular, and perhaps, also, in the longitudinal fibres of the bronchial tubes in the secondary disease of typhus. I have little doubt that such a condition exists in many instances, and that a weakness, with or without softening of these structures, becomes an important element in the bronchial disease of fever. If, as some modern authorities have lately urged, these circular fibres are really the expectorating muscles, we can readily see how any weakness or paralysis affecting them would greatly increase the danger of a patient in fever, already suffering under copious secretion into the bronchial tubes. We can further understand, not only how this condition would superinduce what is termed effusion into the chest in fever, but also why it is that in the treatment of the bronchial disease of typhus there is such danger from the employment of the antiphlogistic method, and how, on the other hand, such admirable results follow from the bold use of tonics and stimulants. I have before drawn your attention to the fact, that, in many of our most remarkable examples of typhous softening of the heart, there was a great amount of the secondary bronchial disease ; and in such cases you will constantly see the associated diseases of the heart, and the lung, progressing or retrograding simultaneously, the treatment adapted to the one being also adapted to the other. In the heart, so far as we know, we have only to deal with the affections of the muscular structure ; in the lung we have at least two different forms of anatomical structure affected—the muscular and the mucous tissues. But the existence of the essential typhous state so far assimilates them that the vital condition of both is depressed in a somewhat similar manner ; and it happens, that whatever is tonic and stimulant to the one is equally so to the other, and that to support and augment the vital energy of both structures, is the only means by which we can add the assistance of art to the efforts of nature in throwing off the disease.

I am particularly anxious to direct your attention to the study of the effects of the typhous state upon the involuntary muscles generally considered ; the subject has been by no means sufficiently examined ; but I am satisfied, that even independent of all we know concerning the pathology of the heart in typhus, there is still much important matter to be worked out with reference to other internal muscular struc-

tures. A very common symptom, as you all know, in our typhous fever, is that of deafness. Now, although I cannot give you any anatomical observations upon this point, yet I think I am justified in suggesting to you, that this symptom may proceed from a condition which is one of the secondary affections of fever, and that it is either a simple alteration of the power of the auditory muscles, or that this lesion is combined with structural softening, or, again, that it is a combination of a muscular with a mucous disease, both under the influence of the typhous state. Of one thing, at all events, we may be certain, that this symptom in typhus is not to be taken as a sign of inflammation either of the brain or its membrane, or of the ear itself. Like the other secondary affections of typhus, it supervenes in the course of the disease, spontaneously and silently. I have used this phrase before, and you understand what I mean by it. It usually comes on in persons who have had no predominance of nervous symptoms, in patients in whom we have had no occasion to direct attention to the head; it is rarely, if ever, preceded by, or accompanied by pain in the ear; it almost always affects both ears, though, in some cases, one organ is more affected than the other; it subsides without treatment, and I do not remember a case in which otorrhœa occurred as a symptom of the affection. You may meet cases of purulent discharges from the ears, especially in young persons of a strumous habit, who have been attacked with earache during their imperfect convalescence; but such cases have no relation to the true typhous deafness with which we are now occupied. As I have said before, I have only clinical observation to bring to bear on this matter; we have no dissections to throw light upon it. One of the traditional prognostics in our fever hospitals is, that this deafness may be regarded as a favorable sign. However this may be, we have rarely, if ever, seen a case in which it occurred prove fatal. A French author has lately published a memoir on the subject of deafness in connection with the fever of Paris, and he refers to the results of several dissections, to show that it is a symptom of internal otitis. We can only say, that, whatever may be the case in the typhoid fever of the continent, such a view is quite inconsistent with our experience; and, even though we have no dissections to guide us, we may yet safely believe, that the deafness which occurs in the typhus of this country, is no proof of the existence of a local inflammation; and that in its rise, progress, and spontaneous subsidence, it is perfectly analogous to those varied affections which belong to the group of secondary effects of the one essential disease. We have, I repeat, only clinical observation to guide us here;

but this is, in itself, a source of knowledge which cannot be too highly prized; one which, under favorable circumstances, gives us more trustworthy results than the most careful *post-mortem* examination. It is often more valuable to determine the state of the living organ, though we cannot see it, than to minutely scrutinize the dead parts. What would medicine be, if its great principles, maxims, and rules were founded solely upon what we see in the dead body.

You must not suppose that I undervalue pathological anatomy; but let me warn you against the error of considering it as a guide in medicine superior to the study of the living man, or as I might say, the living disease. The study of vital conditions is often found to excel *post-mortem* investigations in the evolution of useful results; and there is no class of cases in which this superiority comes out more clearly than in the essential diseases, and especially fevers; no matter whether we seek for a theory of the disease, or for rules of treatment. If we could infer the symptoms of fever from dissection of the bodies of its victims; if we could say that in this case there must have been one class of symptoms, and in another a different order and nature of symptoms; if we could, as it were, mentally reconstruct the fever from its organic remains, then, indeed, what I have said would be an unsafe and hurtful doctrine. But it is not so; and the truth appears to be, whether we consider fever in its totality, or having reference to particular symptoms, that the worst fevers are those which produce the least organic change, and that when these changes are to be found, they are, as I have so often urged upon you, inconstant, unnecessary, and altogether incompetent to explain the nature or character of the disease.

Bear in mind, that medicine had attained a great value before pathological anatomy was cultivated. Its rise and progress were solely due to clinical observation; or, in other words, to the study of the vital conditions in disease, and the effects of remedies upon them. And admitting to the fullest extent the importance of the most minute study of the dead structures, especially when connected with the symptoms and history of disease, we must still, I believe, place pathological anatomy in the second rank, as a means of extending our medical knowledge.

On the other hand, to hold that pathological anatomy has not advanced our knowledge of fever would be an error. If it has not told us what fever is, it has shown us what it is not; and this alone is a great boon. But it has done much more. It has taught us to know the singular though varying phenomena of the secondary diseases; it has shown them in their

rise, progress, and spontaneous retrocession; it has taught us the reaction of new local organic disease upon them, and also their influence in modifying the laws of periodicity. It has not, however, enabled us to say when we find an organ free from change—that it was not functionally affected during life; nor, again, that where we do find structural alteration—that the disease may not have been latent, that is, unattended by any special or distinctive symptoms.

But let us return to the pulmonary conditions in fever. I have spoken of the bronchial affections, and of the development of tubercle either in the course of a fever, or as succeeding to it in a short space of time. Now, I have a few more observations to make on this subject.

I shall not apologize to you for returning to the consideration of the pulmonary affections in typhous fever. The truth is, that this is a subject on which but little information is afforded by systematic works. We have examined the principal symptoms of the bronchial affections in typhus; and also the history of the tubercular deposits which appear as secondary phenomena of typhus fever.

I suggested to you, that tubercular matter might be considered as one of the secondary deposits of typhus; and that we are justified in believing that, under certain circumstances, there may, with the same original or essential disease, be a variety in the nature of its secondary deposits. You will remember, that we examined two cases of tubercle in connection with typhus; in one, the deposit occurred at the height of the fever, at the time when all its characteristic phenomena were best developed; in another, there was an interval of apyrexia between the subsidence of the typhous state and the appearance of the tubercular disease. Some might suppose, then, that there was no connection between the second set of symptoms and the first; but is it not more probable, or, at least, is it not possible that the interval of apyrexia was analogous to the intermissions of an ague, and that the deposits in the second attack were still the result of the original disease; or, again, that the first attack had, as it were, prepared the entire organism for the elaboration of another form of deposit. I have before alluded to the fact, that, in the epidemic in which these accidents were most frequently observed, there was a strong tendency to relapse. And, from all these circumstances, I conclude, that the tubercular disease, in the second attack, may still be considered as the result of the typhous poison.

There are other points which this study of the connection between typhous fever and tubercle helps to illustrate. One

of the most important is, that we are led to look at tuberculosis under the aspect of an acute disease. Our views of it are, therefore, enlarged; for, although what has been termed (though often improperly) acute phthisis has been described in books—yet, in the minds of most men, the idea of chronicity is attached to tubercular disease. But we have seen, that a patient may die with typhous fever and its consequent tubercular deposit within fourteen days. And again, we find, that in the case of the consequent tubercle, that is where the disease has exploded after an apyrexial period, the patient may die with tuberculation of all his organs, and without suppuration of the tubercle; or he may actually have innumerable softened tubercles in the lung and die of the disease within a fortnight after the commencement of the new attack. Such a patient may be said to have died from acute tubercle; but the term acute phthisis is improper, for the symptoms of consumption are by no means necessarily present.

In speaking of the case in which we made the diagnosis of the formation of tubercular deposits during the course of a petechial fever, I believe that I forgot to mention one remarkable symptom, namely, the extraordinary sweating to which the patient was liable. He had several paroxysms of sweating in the course of each day, and to such an extent, that when we removed the bedclothes clouds of vapor rose from the surface.

It is of importance that you should not allow erroneous ideas as to the constant chronicity of these affections to take possession of your minds. Even cancer, in some of its forms, may be a singularly rapid disease. I have observed large cancerous tumors to form under the integuments within a very few days before death. They were filled with the soft encephaloid matter. In this case, however, the patient had long labored under a vast cancerous deposit within the chest. But I well remember another case which still better illustrates the occurrence of cancer as an acute disease. The patient was under the care of my friend the late Dr. Little of Sligo. The case is an example of the rapidity with which organs may become cancerous, such as few persons who have not studied medicine at the bedside could have any idea of. It was that of a lad, aged about 18. He had long suffered from neglected ulcer of the leg. On admission into hospital, he had a vast corroding ulceration, engaging the whole leg from the knee downwards; and so extensive had been the destructive process, and so greatly had the system been exhausted by the suppuration and irritation of the enormous ulcer, that it was determined to remove the limb. For a certain time every-

thing went on well, the wound healed kindly, and the patient not only recovered his appearance, but actually became fat. He was soon to be dismissed from the hospital, when he was attacked with pain of the right side, and symptoms of intense pulmonary irritation. The disease resisted all treatment, and he died within a fortnight from the period of the attack of the pain of the side.

On dissection the lungs were found almost completely filled with masses of the soft white cancer. These masses varied in size from that of a pea to that of a large walnut. I presented the parts to the pathological society. Now, all this singular formation, or at least a very large portion of it, must have occurred in the short time that elapsed between the invasion of the pain and his death; for no one could suppose that with such an amount of disease there could have been perfect freedom from cough or difficulty of breathing.

Before we leave this subject, let me present it to you in another point of view. In these cases we see tubercular disease occurring as a general affection, and not merely as a disease of the lung. In these instances the affection of the lung was simply the production in that organ of a pathological state which engaged other viscera often equally and simultaneously. Now, although we do not say that there is no difference except as to rapidity and extent of deposit between these cases and those of ordinary phthisis, yet it is useful to bear them in mind in all our dealings with that fell disease. The progress of medical opinion is every day tending to the doctrine, that to consider consumption, as the word is usually understood, as an original disease of the lungs, is an error. Why it is that in so many cases the deposit appears to be first formed in the lungs, we do not know; nor why an attack of pulmonary irritation appears so often to be its exciting cause. Perhaps, as in the long, silent periods of an intermittent fever, the disease, even though it be a pure neurosis, still exists, there may be conditions in which the system is ready for the production of organic disease for an indefinite time. This may be true, not only with respect to tubercular disease, but also in many essential affections, including a variety of fevers. And this disposition, this silent state of the malady, may itself pass away, and none may ever know how near the individual was to the invasion of a dangerous or fatal disease. I do not allude to what is called the latent periods of fever, but to a condition in which the occurrence of a fever or other essential disease is a possible or even probable, but not a necessary consequence. Be this as it may, of one thing we may be sure, that the less we consider

phthisis as a pure disease of the lung, the better we shall treat it, and the less, day by day, will it be ranked among the opprobria of medicine. If consumption be not, strictly speaking, a disease of the lungs, but a morbid state affecting the whole economy, you can understand one cause, at least, for the too frequent failures of the attempts to cure it. If the pulmonary lesion be but the second step in the morbid process, or if not only the lung, but other organs are engaged—what are you to expect from adopting the absurd, and often cruel, treatment so commonly used in cases of the disease? The blisterings, the leechings, the setons, issues, and eruptions by tartar emetic ointment, which still disgrace the practice of medicine, will be soon unknown among our more enlightened brethren. You cannot conceive the amount of suffering inflicted, and of positive mischief done, by an adoption of the doctrine that phthisis is to be treated as a localized, original, and irritative disease of the lung. Ask a practical physician as to his experience of phthisis, and he will often tell you, that, among the few cases in which a recovery took place, there were certain instances in which the patients had, either from despair or some other cause, pursued a course very different from that which is so often advised. I have known myself several most remarkable instances, in which a temporary, or even a permanent cure had taken place, yet in which the patients had acted in every way contrary to rules. They had exposed themselves to all vicissitudes of weather; they had taken violent exercise, lived freely, and even drank hard. They recovered; and it is still a question whether this result was owing to the invigoration of the system by the return to their former habits, or to the escape from the enervating effects of warm rooms, relaxing climates, cough mixtures, sedatives, and slop diet; to say nothing of the barbarous issue or seton.

You will, perhaps, say, that this is too long a digression; but, gentlemen, the study of fever furnishes many a text for useful instruction; and I believe that I am not misusing our time. Let me, before I conclude, give you an illustrative case. Some years ago I saw a gentleman, who came to town laboring under all the symptoms of well-marked phthisis. The disease had been of some months' standing, and the patient was a perfect picture of consumption. He had a rapid pulse, hectic sweating, purulent expectoration, and all the physical signs of tubercular deposit, and of a cavity under the right clavicle. I may also state, that the history of the disease was in accordance, in all particulars, with this opinion. I saw this patient in consultation with a gentleman of the highest sta-

tion in the profession, and we both agreed that there was nothing to be done. This opinion was communicated to the patient's friends, and he was advised to return to the country. In about eighteen months afterwards, a tall and healthy looking man, weighing at least twelve stone, entered my study, with a very comical expression of countenance:—"You don't know me, doctor," he said. I apologized, pleading an inaptitude that belongs to me for recollecting faces. "I am," he said, "the person whom you and Dr. — sent home to die last year. I am quite well, and I thought I would come and show myself to you." I examined him with great interest, and found every sign of disease had disappeared, except that there was a slight flattening under the clavicle. "Tell me," said I, "what you have been doing?" "Oh!" he replied, "I found out from the mistress what your opinion was, and I thought as I was to die, I might as well enjoy myself while I lasted, so I just went back to my old ways." "What was your system of living?" said I. "Nothing particular," he said, "I just took whatever was going." "Did you take wine?" "Not a drop," he replied; "but I had my glass of punch, as usual." "Did you ever take more than the one tumbler?" "Indeed, I often did." "How many? Three or four?" "Aye, and more than that,—I seldom went to bed under seven!" "What was your exercise?" "Shooting," he said, "every day that I could go out." "And what kind of shooting?" "Oh, I would not give you a farthing for any shooting but the one!" "What is that?" "Duck shooting." "But you must have often wetted your feet?" "I was not very particular about the *feet*," says he, "for I had to stand up to my hips in the Shannon for four or five hours of a winter's day, following the birds."

So, gentlemen, this patient spent his day standing in the river, and went to bed after drinking seven tumblers of punch every night; and if ever a man recovered from phthisis he had done so when I saw him on that occasion. Suppose, now, that he had been confined to an equable temperature, and a regulated diet, and had been treated in all respects *secundum artem*, what would have been the result? Any of you can answer the question. In point of fact, this very treatment had been adopted during the first three months of his illness, and his recovery may be fairly attributed not so much to the duck-shooting and whiskey punch, but to the general tonic and undepressing treatment which he adopted for himself, and which his system so much required to enable him to throw off the disease.—*London Lancet*.

### Radical Cure of Ascites by the Introduction of Air into the Peritoneal Cavity.

Mrs. — was the subject of a premature labor, which was followed by peritonitis, succeeded by general dropsy. The lower extremities became œdematous, fluid collected rapidly in the abdominal cavity, and there was evident effusion in the lower lobes of both lungs. The case was complicated by much enlargement and induration of the liver and displacement of the heart. The patient was subjected to a severe course of therapeutic treatment, which had the effect of relieving the lungs; but the accumulation in the abdomen was so great as to render necessary its evacuation by operation; this was repeated seven times within thirteen weeks, the quantity of fluid withdrawn varying from twenty-four to sixteen pints at each operation. Dr. Henry A. Hartt of this city, under whose care the patient was treated, determined to effect, if possible, the arrest of the secretion by other means than the administration of medicine, having tried numerous remedies with unsatisfactory results. Accordingly, after the last operation he inserted a curved canula, about an inch and a half long, in the puncture made by the trochar, which was retained *in situ* by an elastic band. This canula was worn for three days, when it was withdrawn; and subsequently, for five weeks successively, he introduced every day an ordinary female catheter for an inch and a half, permitting free access of air to the cavity. These proceedings produced inflammatory action of a subacute character, which readily yielded to mild treatment.

There has been no accumulation of fluid since the introduction of the canula, sixteen weeks ago, nor has there been any unpleasant constitutional disturbance; on the contrary, the patient has been relieved from the dyspnœa and other attendant symptoms of the dropsy, and her general health seems to be much improved. There was some thickening of the abdominal walls, in the lower portion of which an abscess formed; this was opened, discharged freely, and is now healed. She is still under treatment for the hepatic disease.

Dr. Hartt intends to publish a detailed account of the case. It possesses much interest, from the success of the experiment to arrest the ascites upon the principle of the radical cure in hydrocele. It was a bold attempt, and would seem to justify the parallel practice recommended and adopted by Dr. Bowditch in the case of the pleural cavity, and the ovarian cyst by Dr. Simpson of Edinburgh.

*American Medical Monthly.*

## A Sketch of the Present Condition and Treatment of some of the Diseases of the Urinary Organs.

BY WM. ACTON, ESQ.

*Gonorrhœa*.—During the last few years, M. Ricord has been gradually relinquishing the employment of caustic injections in the treatment of this complaint. He still thinks that in many cases this is the treatment attended with the most certain success; but every now and then instances occur in which the pain is very severe, the inflammation runs high, and then, instead of a cure being obtained, the disease relapses into a chronic state, which resists all our means of cure; in addition to this, the patient requires a great deal of watching, more than a surgeon in full practice is able to devote to each individual; so that, as I mentioned above, Ricord now employs caustic injections very rarely, and prefers prescribing capsules, and the following injection: Sulphate of zinc, acetate of lead, of each fifteen grains; tincture of catechu, one drachm; Sydenham's laudanum, one drachm; rose water, six ounces and a half. My own practice in London fully bears out this experience, and it is only in old rebellious cases of gleet, in spermatorrhœa, and in chronic affections of the bladder, that I now employ nitrate of silver injections; but in these cases the judicious employment of caustic is of the greatest value, and will at once effect a cure, when all other means fail; still, even in these cases, the remedy must be employed with care, otherwise ill consequences will arise.

In the subacute stages of gonorrhœa, when there is no scalding, but a good deal of discharge, I have found the solution of lead answer best in London, together with copaiba capsules, not taken in large numbers but at repeated intervals, so as to charge the urine constantly with the essential oil; but I still (as in the last edition of my book) continue to insist that gonorrhœa will rarely be rapidly cured, unless the surgeon takes the precaution to show a patient how to use his syringe, and see that the instrument be properly made. Having insisted elsewhere in great length on these points, I do not think it necessary here to revert to them; but to these petty matters I attribute much of my success, and not to any specific treatment. It is, however, worthy of note, that the time of year and damp weather have a great influence in retarding a cure.

*Gleet*.—Since the publication of my last edition I have experimented largely with counterirritation, and I think my

success deserves a few moments' consideration. I am in the habit of recommending my patients to paint the under surface of the urethra with tincture of iodine every night, as well as applying the liquid to the perinæum, so as to produce a slight peeling off of the skin. The remedy is then to be left off, and repeated when the skin has regained its cuticle. In the more chronic cases I employ a solution of cantharides dissolved in chloroform, with which I paint the skin well in the situation mentioned above. The chloroform evaporates, leaving the cantharidine *in situ*. But as I intend shortly publishing a paper on this subject, I shall not further allude to it here.

*Swelled Testicle.*—Compression of the testis, by means of strapping, has now been nearly given up by M. Ricord, in his hospital; it is, he still admits, an excellent remedy when well applied, but a patient should be seen, in the early stages, twice a day, and the strapping reapplied if necessary. Without watching, this treatment is sometimes accompanied with disagreeable consequences, which aggravate the complaint, at least the French professors think so; but in London, in private practice, I have every reason to be satisfied with the treatment, which shortens the duration of the disease very much, and dispenses with the usual inconveniences attending these cases. M. Ricord places his principal dependence on leeches, mercurial ointment, and plaster; and, above all, purgatives taken every morning, consisting of aperient salts. In this last recommendation I can bear testimony most fully.

*Varicocele.*—M. Ricord showed me several cases of varicocele, treated by his instruments, in the progress of cure, and stated, that he never but once had an accident with them, and that arose from his pulling away the ligature too soon, hæmorrhage came on, and, in cutting into the tumor, he found that the silk had failed to divide a small portion of the inclosed parts, and hæmorrhage took place from an *arteriole*. He added, he has no occasion to publish any ill consequences—they will be known, if they occur, soon enough.

On the question of the return of the complaint, he says, he has seen relapses in the practice of others, not in his own. When all the vessels are divided, the complaint cannot return at once, but it may in some cases. In what operation does not this occur? Are we, on such grounds, to defer all operations?

Impotence he has never noticed as a result; on the contrary, the testicle suffers no longer from the stagnation of its blood vessels, when relieved of the pressure by the operation.

In private practice we are rarely called upon to resort to

this operation. Patients generally apply to us early, and then palliative remedies suffice; and in the more advanced stages I do not usually recommend recourse to ligature of the veins, as the patient often would refuse; and experience shows that support of the scrotum, by means of a bandage, strapping the testis, and the constant wearing a varicocele ring, suffices to relieve the most urgent symptoms.

*Charleston Med. Jour. and Review.*

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### Solidified Milk.

A committee of the New York Academy of Medicine recently visited the manufacturing of this important addition to culinary medicine. It must prove invaluable to travellers and especially to mothers living in cities where most of the milk is procured from diseased cows fed with distillery swill. We copy the following from the American Medical Monthly:

To 112 lbs. of milk, 28 lbs. of Stuart's white sugar were added, and a trivial proportion of bicarbonate of soda, a teaspoonful, merely enough to insure the neutralizing of any acidity, which in the summer season is exhibited even in a few minutes after milking, although inappreciable to the organs of taste. The sweet milk was poured into evaporating pans of enameled iron, embedded in warm water heated by steam. A thermometer was immersed in each of these water baths; that, by frequent inspection, the temperature may not rise above the point which years of experience have shown advisable.

To facilitate the evaporation—by means of blowers and other ingenious apparatus—a current of air is established between the covers of the pans and the solidified milk. Connected with the steam engine is an arrangement of stirrers, for agitating the milk slightly whilst evaporating, and so gently as not to *churn* it. In about three hours the milk and sugar assumed a paste consistency, and delighted the palate of all present; by constant manipulation and warming it was reduced to a rich, creamy looking powder, then exposed to the air to cool, weighed into parcels of a pound each, and by a press, with the force of a ton or two, made to assume the compact form of a tablet, (the size of a small brick,) in which shape, covered with tin foil, it is presented to the public.

Some of the solidified milk which had been grated and dissolved in water the evening previous, was found covered with a rich cream; this skimmed off, was soon converted into excellent butter. Another solution was speedily converted into wine whey, by a treatment precisely similar to that employed in using ordinary milk. It fully equalled the expectations of all; so that solidified milk will hereafter rank among the necessary appendages of the sick room. In fine, this article makes paps, custards, puddings, and cakes, equal to the best milk; and one may be sure it is an unadulterated article, obtained from well pastured cattle, and not the produce of distillery slops—neither can it be *watered*.

For our steamships, our packets, for those traveling by land or by sea, for hotel purposes or use in private families, for young or old, we recommend it cordially as a substitute for fresh milk.

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### **The Behavior of the Pelvic Articulations in the Mechanism of Parturition.**

BY DR. MATTHEWS DUNCAN.

In the guinea pig, there takes place at the time of parturition a very considerable separation of the pubic bones, the ligamentous tissue of the symphysis stretching in this small animal to the extent of an inch, or even more. In the guinea pig, the motions of the iliac bones are analogous to those of abduction of the limbs. In the cow, such movements are absent. The symphysis pubis is consolidated by bony union, and consequently abduction of the iliac bones is impossible. But the sacroiliac joints become much relaxed, as also the sacrosciatic ligaments, and by these changes the ilia become extensively movable upon the sacrum in an antero posterior direction, the motions being analogous to those of flexion and extension in the limbs. The final result of these changes in the guinea pig and the cow is to enlarge the genital passage for the transmission of the calf; and these two animals present, respectively, characteristic examples of the two different sets of changes by which this result is obtained in different animals.

In the latter half of pregnancy in the human female, the soft tissues contributing to form the pelvic joints are found softened, as if by serous infiltration; and the joints are consequently relaxed. The softening of these tissues is accom-

panied by their increase of thickness, a change which will itself have, as a necessary consequence, the separation of the bones and enlargement of the pelvic circle. And this favorable circumstance, along with others connected with the motions of the joints, forms an important part of the explanation of some cases of delivery, by a simpler operative procedure than might at first have been considered necessary. Sometimes this thickening is to a very great extent, as in the cases of Madame Boivin and others, where the pubic bones were separated an inch or more.

The movements in the pelvic joints in the human female are the same as those occurring in man as well, only in a minor degree, as has been demonstrated by Mr. Zaglas. They may be described as consisting in the elevation and depression of the symphysis pubis, the ilia moving upon the sacrum. By the elevation of the symphysis (or projection forwards of the promontory of the sacrum,) the angle of inclination of the pelvis is diminished, and the conjugate diameter of the brim is lessened to the extent of one, or even two lines; the corresponding diameter of the outlet is increased about twice as much. This different ratio of the effects of the motion upon the brim and outlet, results from the fact of the centre of motion being much nearer the promontory than the apex of the bone (in the second sacral vertebra.) The promontory, therefore, will describe in its motions an arc of a smaller radius than the apex.

That the alteration of the dimensions of the brim and outlet by these movements is not insignificant, but the reverse, is a proposition which every obstetrician will confirm. It only remains, then, to be observed, how these alterations correspond with the phenomena of the progress of the child in parturition. Now, in the erect position, the brim of the pelvis is in its enlarged condition, the symphysis pubis being then depressed, while the outlet is correspondingly contracted. In the course of the first stage of labor, while the head is pressing into the brim, the human female is generally standing, sitting, or lying on her back, or in an easy position. But as soon as the head has descended into the pelvis and infringed upon the sensitive vagina, then forcing efforts accompany the pains. These forcing efforts consist, in great part, of powerful contractions of the anterior abdominal muscles, the effect of which, especially the action of the two recti-muscles, will be to tilt up the symphysis pubis, thus throwing the promontory forwards, contracting the brim, and enlarging the outlet, and diminishing the angle of inclination of the pelvis. To all these changes, the position usually assumed by the female

in the second stage of labor will contribute. For the simple bending of the body forwards (even in man,) has for its effect the tilting upwards of the apex of the sacrum, and enlargement of the outlet. And it is a curious fact, that a woman in her forcing pains, in the second stage, is found to draw up her legs, and bend her body forwards, thus inducing changes in her pelvis, which facilitate the advance of the child in that stage.

These motions of the pelvic bones in the human female agree with those taking place in the cow at the time of labor. The changes occurring at this time in the guinea pig, find their analogies in the altered condition of the symphysis in woman—changes which in her are generally only to a small extent.—*Edinburgh Quarterly, from Dublin Quarterly Journal of Medical Science.*

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### On Sarcinæ Ventriculi.

BY ARTHUR LEARED, M. D.

I have lately had, through the kindness of Mr. Wells, of Artillery Place, a case of chronic disease of the stomach, attended with vomiting of sarcinæ. Its progress was recorded, in many respects, with unusual care, and the results are, I think, interesting. Upon these, therefore, it is my intention to make some observations.

April 13, 1854.—Saw for the first time Mrs. T., 52 years of age, of middle height, and when in health, moderately stout. She is now emaciated, and complains that she has had a “sinking in the stomach,” accompanied by vomiting, for upwards of a year,—the latter was at first only occasional. Attributes its commencement to fretting on account of altered circumstances; but, having contracted scarlatina from her child, six months ago, the vomiting became of daily, and soon of even more frequent occurrence, and now happens from three to four hours after any considerable meal; sometimes also in the morning on awaking. Severe pain, lasting about twenty minutes, precedes the vomiting. Commencing in the right iliac region, pain shortly occurs, also a little to the left of, and parallel with, the umbilicus. In the position of the latter pain, a tumor, which she describes as the size of a hen’s egg, sometimes appears. It is increased by the effort of vomiting, but subsides immediately after. All pain then ceases. She has frequently a feeling of tightness about the stomach,

in addition to the sinking; is often "windy;" but there is no epigastric pain or burning sensation whatever, and seldom nausea. A careful examination of the abdomen yielded no result worth recording. The vomit consists of a small portion of watery fluid, followed by a gush of a thick, brown matter, with scarcely apparent effort. Its quantity varies from a pint to a quart, seldom less or more. It tastes, she says, "bitter and sour." Much confined to bed from debility, she has nevertheless a good appetite, and is seldom thirsty. For the last three months her bowels have not been moved oftener than about once weekly, and always by strong purgatives. Pulse quiet; catamenia regular; head quite unaffected.

A portion of the vomited fluid having been allowed to stand some hours, indicated active fermentation, the surface being raised and covered with bubbles. On being shaken up, a turbid, strongly acid liquid, sp. gr. 1.018, replaced the upper, more consistent, and dark brown stratum, which now formed a copious sediment. Examined under the microscope, this was seen to be crowded with *sarcinæ*, mixed with the ordinary debris of food.

Ordered,  $\mathfrak{R}$  Liquoris calcii chloridi  $\mathfrak{zj}$ ., aquæ  $\mathfrak{3vj}$ . Sumat haustum talem ter quotidie.

May 26.—Six weeks have elapsed since the above was prescribed; she has not taken it regularly, but is nevertheless, much better. After the first few days I could discover no *sarcinæ* in the vomited fluid. The vomiting had been reduced to an average of not more than once daily, and this improvement has continued. Since then she has had scarcely any pain or appearance of the tumor.

She was to-day admitted under my care into the Royal Infirmary for diseases of the chest. A daily register of the case was now kept, of which the following is an abstract:

On the first five days she took the liq. cal. chlor. as before directed; vomiting occurred daily with one exception, after dinner (at one P. M.) at intervals of from one to four hours—average three hours and a half. It occurred on two nights also.

On the eleven succeeding days, she took a drachm of hyposulphite of soda in a little barley-water thrice daily, there being few omissions, with these results:—First and third days, no vomiting. On the nine remaining days it occurred from one to five hours after dinner—average, two hours fifty minutes. On three of the latter days, however, it occurred at four A. M. also; and on two of these at nine P. M. and ten P. M. respectively. The medicine was omitted, as she said it made her weak.

On the three succeeding days she had no medicine. On the first she vomited at four P. M.; the second, at four A. M., and at nine P. M.; the third at four A. M., and again at half past four P. M., although she had no dinner.

For the next fourteen days she took the following:—

R̄ Infus. rhei. infus. gent. aa. ʒss., fiat haust. unam talem ter indies ante cibum sumend.

First day, vomited at half past four A. M. (medicine not commenced with,) again at five P. M. Vomiting after dinner occurred on six days; longest interval six hours and a half; shortest four: average, five hours ten minutes. It also occurred on two other days, times not noted; but on five of the fourteen days there was no vomiting.

The following pills were now substituted:—

R̄ Creasoti *m* iss., ext. opii gr. ¼, ext. gent. q. s. M. ft. pil sumat. anum talem ter quotidie ante cibum.

These were also taken for fourteen days. They appeared at first more beneficial than the draughts, especially in diminishing the quantity vomited. Vomiting occurring but six times during the above period. The entire cessation of vomiting on the last three days of it appearing to be caused by her now evidently sinking condition, they were omitted.

From this date (June 12) to her death, (June 16) although she continued to take food, there was no vomiting. Death ensued slowly from exhaustion.

*Post-mortem.*—The body was in the last stage of emaciation.

*Head.*—Not examined.

*Lungs.*—Right—in state of extreme collapse; pleural surfaces universally adherent. Left—half of upper lobe healthy; remainder of organ more or less infiltrated with cancerous looking matter.

*Heart.*—Natural.

*Liver.*—Of moderate size, and apparently healthy; gall-bladder nearly full of bile.

*Stomach.*—This organ was completely dislocated. It extended perpendicularly from the diaphragm, against which its cardiac extremity pressed to a line that would connect the anterior superior iliac spines. Lying entirely to the left of the spinal column, it occupied the position of the descending colon, which at first sight it closely resembled. It contained about a pint of “coffee-grounds” fluid. Its greatest length, when empty and laid flat was  $11\frac{1}{4}$  inches. Central width  $2\frac{1}{4}$  inches. Capacity, measured by distention with water by means of a funnel in the œsophagus, the pylorus being tied, exactly a quart. The coats of the organ, for about three

inches from the pylorus, were transformed into a thick unyielding mass. On section, this was found to be cancer of the colloid variety, with some fibrous intermixture. It presented under the microscope the usually received evidences of malignancy; and Dr. Bristowe, pathologist to St. Thomas's, who was kind enough to examine the morbid growth, agreed with me as to its nature. The cancerous mass terminated abruptly in a ring of modules, some as large as marbles, projecting into the stomach; beyond this the mucous membrane appeared quite healthy; but the muscular coat, near the diseased part, was hypertrophied. A test tube 5-12th inch diameter was with difficulty passed through the tortuous passage representing the pylorus portion of the stomach. This tract was almost completely denuded of mucous membrane.

*Pancreas.*—Found resting on the spinal column, very nearly parallel with it. Its upper portion very much indurated.

*Spleen.*—Natural, but displaced.

*Intestines.*—The small was slit throughout; it was nearly empty. Duodenum as usual unaffected by the disease. The lower portion of the ileum was much thinned, and its calibre contracted. The mesentery was studied with cancerous masses, varying from the size of millet-seed to split peas. The caput coli was full of fecal matter.

*Kidneys.*—Large, but of healthy structure, except that in the left were some cysts containing fluid.

I attribute the vertical position of the stomach, the normal one in the foetus, to pathological causes. Rokitsansky, indeed, mentions scirrhus pylorus as a cause of displacement from its weight. If, however, we consider the weight of contents ordinarily sustained by the stomach, it is difficult to ascribe so remarkable a displacement as the present to the addition of a few ounces of scirrhus mass. I imagine that the elongation of the attachments of the organ from extraordinary movements due to pyloric obstruction, is in these cases the real cause of dislocation.

I have preserved the stomach, and have been particular in describing its size. According to some experiments of my own on the capacity of the adult stomach, that of this was not more than half the average.

Copious vomiting of yeast-like fluid, containing sarcinae, has been regarded by that accurate observer Dr. Todd, as almost pathognomonic of dilated stomach, with obstructed pylorus.\* The present is certainly an exceptional case. Yet it would seem, from a comparison of the quantity vomited,

\* Medical Times and Gazette, Vol. IX, p. 2.

with the ascertained capacity of the stomach, that it must have been occasionally distended to the utmost. It is remarkable, that the quantity vomited at a time on a few occasions even slightly exceeded the capacity alluded to.

In three other fatal cases of organic disease of the stomach occurring in my own practice, the origin of the disease was attributed by the patients to mental suffering. In certain cases, probably of special diathesis, mental influence appears to act thus in locating disease.

With regard to remedies, it would appear from the foregoing, that chloride of calcium was more efficacious in restraining the vomiting than hyposulphite of soda. Full doses of the latter were given, in order that it should have a fair trial. Its beneficial action was at first more apparent than subsequently; but I observed this to be the case with all the remedies tried. It is to be remarked, however, that from the first exhibition of chloride of calcium, the frequency and severity of the vomiting became permanently diminished; and the entire cessation of pain is fairly ascribable to the same agent. I constantly questioned the patient while in hospital in reference to pain; and it is an interesting fact, that, during that period, she suffered none whatever. The relation between the non-appearance of the tumor, cessation of pain, and diminution of vomiting, was, I think, however, clearly established by the position in which the stomach was found. Improvement of these symptoms coincided with diminution in the quantity of the distending gas.

Although, as far as I am aware, chloride of calcium is now, for the first time, recommended for affections of the stomach, I had previously used it extensively in dispensary practice. In cases of atonic dyspepsia, with acidity and foul eructations, its use is attended with excellent results. Many old sufferers have assured me that no remedy had proved so beneficial to them. I explain this, from its decomposition by many acids likely to be present in the stomach, either abnormally or in excess, their being precipitated thereby, and also to the evolution of free chlorine. To the latter, the destruction of sarcinæ is, perhaps, to be attributed. From close microscopic observation during the exhibition of both, I believe this power to be possessed at least as much by chloride of calcium as by sulphite of soda. The point on which I lay stress at present is the permanent improvement of symptoms after liq. cal. chlor. had been a short time taken. Was some catalytic body, distinct from that concerned in the fermentation which subsequently occurred in the stomach, eradicated by this agent?

On omitting the above remedies sarcinæ soon reappeared, and were afterwards invariably found in the vomited fluid. I also noticed, both associated with sarcinæ, and as constantly when they were not present, a profusion of irregularly rounded, semitransparent bodies, of a greenish brown color, smaller than sarcinæ, but of variable sizes, more or less aggregated in masses. The constancy, similarity, and general appearance of these bodies made it impossible to confound them with debris of food.\* I cannot but regard them as embryonic sarcinæ, and that influences destructive to the maturer organisms only arrested their development. This would explain the rapidity with which sarcinæ are sometimes reproduced after apparent total destruction. According to Frerichs, sarcinæ are developed from primitive round cells.

The effect of remedies on the vomiting was marked by its aggravation on their omission. But that sarcinæ were not its essential cause was plain because the greatest improvement was effected by remedies, with the use of which sarcinæ coexisted.

Different kinds of diet were tried, but with less difference of result than might be expected, and great difficulty was experienced in restraining the craving of the patient for certain articles. Animal food appeared most suitable. Vomiting was always increased by a bulky diet, as bread and broth or gruel. Constipation became at length very unmanageable; castor oil was latterly fancied by the patient as a purgative, but it required the addition of croton oil to insure effect. The suspension of the renal secretion was remarkable. On two occasions the quantity of urine passed in twenty-four hours is noted as only two and a half ounces; yet the skin was constantly parched. Diuretics were tried, and seemed ineffective. Compared with the thirst and dryness of the skin in diabetes, the absence of thirst in this patient was interesting. It points to an intimate relation between perception of thirst and increased renal action. In the present case, there was simple abstraction of pabulum from the secreting organs. From a comparison of the quantities of urine passed with the quantities vomited in twenty-four hours, on eighteen occasions, accurately noted, I find a very close inverse relation between them. The urine was generally dark colored, of high specific gravity, and of variable reaction, occasionally depositing whitish lithates. It was often so charged with urea that a very copious crystallization resulted on addition of nitric acid. I have frequently observed this excess of urea in cases of chronic copious vomiting.—*London Lancet*.

\* Whether *torulæ* were present in the vomit when first examined I have omitted to note; but they were not found in it while the patient was in hospital.

## Some Remedies for Stomach Disorders.

BY GEORGE BUDD, M. D.

[In his 8th lecture on disorders of the stomach, Dr. Budd makes some useful remarks on the use of the mineral acids in various kinds of indigestion. But these have been so well treated of by Dr. Prout and others, that we will here only give Dr. Budd's remarks on *vegetable bitters*.]

Quinine, and the bitters generally, are especially grateful to persons who have injured their stomachs by hard drinking. With such persons they improve the appetite and strengthen digestion, and have a bracing effect upon the system at large.

In persons exhausted by over work, or wherever weakness of the stomach is the result of general debility from other causes, they often do much good in the same way—*by improving the appetite* and strengthening the digestion.

They do harm in the organic diseases of the stomach; in plethoric states of the system; and generally where there is a furred tongue, or where the urine throws down a sediment of lithic acid, or of lithate of ammonia. Their most striking effect is, to improve the appetite, when this has been impaired from hard drinking or from over work, or from nervous exhaustion from other causes; and the best time for giving them is from half an hour to an hour before meals.

The different bitters have not precisely the same effect. Calumba has a sedative influence not possessed by the others, and probably on this account has had a wider reputation as a remedy for mere indigestion. Gentian and chiretta (which is of the gentian tribe, and is much employed by practitioners in India) tend to increase the secretion of the liver, or, at any rate, do not impede the secretion of the liver, which quinine and quassia seem often to do. They are, therefore, better suited to bilious persons, and to those cases of indigestion where the secretions of the liver are defective.

The different preparations of steel are especially useful in the indigestion that occurs in chlorosis, and generally where weakness of the stomach results from anæmia.

They do harm in plethoric states of the system, and generally where there is a furred tongue, or where the urine throws down a sediment of lithate of ammonia or of lithic acid.

The citrate, or ammonio-citrate, is the most agreeable preparation to the taste, and generally the most grateful to the stomach. If there be any disposition to sickness or nausea, or any tendency to furring of the tongue, it may be given in

conjunction with the bicarbonate of soda or potash. This makes a mixture having much the same effect as Griffith's mixture—the *mistura ferri composita*—and far more agreeable.

The muriated tincture of iron is more astringent than the other preparations, and may be given in conjunction with dilute muriatic acid, in the forms of indigestion suited to this latter medicine, when these exist in states of anæmia.

The sulphate of iron, like other metallic sulphates, has a tendency to cause sickness, and should not be given in cases where a disposition to sickness exists.

Steel medicines do good by improving the quality of the blood rather than by their immediate action on the coats of the stomach, and are best given at meal times. They then are mixed with the food, and gradually absorbed with the products of digestion, and are less apt to offend the stomach and to cause headache than at other times.

Whenever steel medicines are given, it is essential that a regular action of the bowels be kept up. These medicines tend to confine the bowels and to cause evolution of sulphuretted hydrogen in them; and, unless this tendency be counteracted, they are apt to furl the tongue and cause headache.

The choice of purgatives is a very important matter in stomach disorders. The different purgatives exert their chief action on different portions of the intestinal canal; some excite the secretion or the peristaltic movement of one part, some of another. In disorders of the stomach and bowels, where a purgative is required, care should, therefore, be taken to select those which are least prone to irritate the injured or disordered part.

Castor oil, for example, offends the stomach, but acts very mildly on the large intestine. It should not be used in stomach disorders, or where, from any cause, a tendency to vomiting exists; but is better than any other purgative in dysentery, or during convalescence from typhoid fever, when the intestines are ulcerated, and in various other conditions where a speedy and sure purgative, and one not apt to irritate the large intestine, is required.

Senna acts chiefly on the small intestine, and, besides exciting its peristaltic action, increases the secretion from its mucous membrane. It acts, also, on the liver, increasing the secretion of bile. In conjunction with a few grains of calomel or blue pill, it is, as every one knows, one of the best purgatives in bilious states of the system, or where an evacuant is required; but in mere disorders of the stomach, it is often objectionable, from the tendency it has to cause sickness.

The best purgatives in stomach disorders are aloes and colocynth, which exert their chief action on the large intestine. These medicines may do much harm when the large intestine is ulcerated or inflamed; but in simple ulcer of the stomach, and in the most severe functional disorders of the stomach, they may generally be given without causing either pain of the stomach or sickness. In some kinds of functional disorder of the stomach, aloes seem, indeed, like other bitters, to improve the appetite and strengthen digestion.

Aloes appear to act more exclusively on the large intestine, and irritate the stomach less than colocynth, and hence, in stomach disorders is generally preferable to it.

Where, from the existence of piles, or from pregnancy, or some other condition, these medicines are objectionable, the best substitutes for them in stomach disorders are the saline purgatives, which exert their chief action on the small intestine, and have little tendency to cause pain in the stomach or sickness.—*Med. Times and Gazette*, April 29, 1854, p. 425.

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### **Chloroform in Hooping Cough.**

BY JAMES GERRARD, M. R. C. S., ENG.

The prevalence of hooping cough, in this district, for a now protracted period, has served, from daily observation, to convince me that its nature and pathological condition are still but ill understood; and that, of all the host of remedies which have been from time to time proposed, no one can be looked upon as a specific. I do not mean to burden the Association Journal with an enumeration of the many and various opinions advanced by authors on the subject, nor from the incongruous mass which could be thus presented, can I pretend to extract only the truth; it must suffice for my present purpose to state my belief in the spasmodic character of the disease, and, in accordance with this view, to direct attention to a plan of treatment, which may not be new, but which, in my hands, has been in a very marked degree successful.

I was recently requested to see a female child, eight years old, suffering severely from this disease; I found her in a very distressing paroxysm, and presenting all the signs of immediate suffocation; this lasted a few minutes, and ceased with the discharge of the contents of the stomach. The

swollen and turbid face and blood-shot eyes showed the frequently recurring struggle, and the extreme agitation and fright of the little patient, with the alarm of the parents, induced me to have recourse to any remedy I considered most likely to be of benefit, in averting or lessening the severity of similar paroxysms. She had been previously taking ipecacuan wine, as recommended by a dispensing druggist; to a phial, containing about half an ounce, I added twelve drops of chloroform, and after shaking the mixture well, gave her a teaspoonful. No paroxysm appeared soon to occur, and I left her with directions to repeat the teaspoonful at the end of the hour, and afterwards, at intervals of two hours, for the two remaining doses. On inquiry in the evening, I learned she was much improved; the cough had recurred but twice, and with much less severity; from this period the disease gradually and rapidly declined, and she was soon quite well.

In several cases since, I have used the same remedy, and in no one have I had reason to question its value. In young children, of course, great care is requisite, and in them more particularly is the good effect apparent; in one, three years old, I gave two drops of chloroform in ipecacuan wine, twice a day for two days; the patient, a girl, did not *hoop* after, and is now well. To ensure the proper regulation of the doses, I now add to each separate quantity of ipecacuan wine or other vehicle, the exact number of drops of chloroform necessary for the dose, and thus avoid the uncertainty which must attend a careless or imperfect mixture of the ingredients. Chloroform possesses one great advantage over most medicines: children do not dislike its taste, and, properly mixed, they will take it readily.

In some cases of hysterical spasmodic cough, seen by Dr. Andrew Wood, and reported to the Medico-Chirurgical Society of Edinburgh, in March last, he administered chloroform with success. I am not sufficiently satisfied of the distinctive character of hooping cough, to think that a remedy, successful in one case, might not be so in the other. Considering uncomplicated hooping cough to partake more of a spasmodic than of any other nature, I hold the general indications of the treatment to be: To relieve or prevent the spasmodic paroxysms: this will be most effectually done by the internal use of chloroform. To remove any obstruction collecting in the air passages, by the use of occasional emetics, of which ipecacuan wine is the best. To support the system under the weakening effects of the disease.

Having lately seen, and in this manner treated, a large number of cases of this disease, I consider myself justified in

bearing testimony to the good results obtained. It is sad, indeed, to witness young creatures in the severity of the paroxysms, without being able to propose any measure of relief; for, as generally treated, the disease is an *opprobrium medicorum*. If others will give their experience of chloroform treatment, for doubtless many have tried it, or will give it a chance if not already tried, we may, perhaps, arrive at a more decided plan of managing a disease which has hitherto helped, in no slight degree, to swell our bills of mortality.

*Association Med. Journal.*

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### External Division in Stricture of the Urethra.

PERFORMED BY MR. COULSON.

Richards S—, aged forty-four years, was admitted, September 16th, 1854, with severe stricture. His stream of urine was very small, being compelled to pass it every hour or oftener in the day, and at night came away involuntarily. The latter fluid was alkaline, and loaded with thick ropy mucus. In addition to his local symptoms, the patient had a cough, to which he had been subject for some time past. His countenance was pale and anxious; his flesh and strength much reduced. He had been suffering from stricture for many years past, and an attack of retention having come on, he applied at this hospital.

No. 2 catheter was then passed with much difficulty, and the urine drawn off. After a short stay in the hospital, his general health improved considerably, and dilatation has been repeatedly tried, but no instrument, however small, after the first week, could be got into the bladder. The stricture was situated at the bulb, and on pressing the perinæum, it felt like a hard cartilaginous ring; and from repeated attempts at dilatation, a false passage just in front of the stricture had been made.

In consequence of the character, extent, and duration of the stricture, Mr. Coulson proposed external division as the course most likely to afford the patient relief.

October 11th.—After considerable difficulty, Mr. Syme's smallest grooved staff was passed through the stricture, and the contracted part divided upon it.

Mr. Coulson commenced his incision in the median line, terminating it half an inch in front of the anus, the incision being nearly two inches in length. The staff was soon

reached, and the knife passed along it, from behind forward, cutting through a gristly, unyielding substance, of which the stricture was composed. A straight grooved director was then passed *into the staff under the bladder*. The staff was withdrawn, and a No. 8 catheter introduced *without difficulty*.

The catheter was now firmly fixed by tapes, and the patient removed to bed. During the operation, which occupied less than two minutes, Mr. Coulson kept the thumb and forefingers of the left hand on either side of the raphe, so that the incision could not deviate from the central line, a point to which he attached much importance.

Before the staff was withdrawn, Mr. Coulson passed, as stated above, a grooved director from the external wound into the bladder, which instrument served as a guide to the introduction of the catheter. This latter plan may be of essential service in obviating any difficulty which might arise in reaching the distal extremity of the urethra.

The elastic catheter, thus introduced with the aid of the director, was retained fifty-four hours, and then withdrawn. It was introduced again at the end of a fortnight, since which it has been passed twice a week.

The patient's general health has considerably improved, he passes urine in a good stream, and a No. 10 catheter can be introduced into the bladder without the least difficulty.

This was clearly a case in which dilatation could not any further have been tried with any chance of success. The hardness and extent of the stricture, the difficulty of getting even the smallest instrument through it, and the existence of the false passage, would have been insuperable difficulties in the way of this plan of treatment.

In concluding the relation of this case, and of the series, we would just remark, that the more we see of stricture of the urethra and its disastrous consequences, the more we are inclined to hail those operative measures which, brought forward by men of experience, hold out a prospect of giving relief to a class of patients whose sufferings are very great. Let not, however, the profession be exclusive; let us examine with impartiality the remedial means which are proposed, and, as there is considerable variety in the cases brought before surgeons, they should be acquainted with the different lines of practice which have been proposed. We shall not add a word to the remarks we made last week respecting the merits of the internal or external incision; and shall only express the hope that the treatment of stricture may be conducted with all the vigor and decision which are imperatively called for in so annoying and dangerous an affection.

That stricture of the urethra is really an affection which eventually puts the patient's life in great peril, is well known to every member of the profession; we shall, however, merely, by way of illustration, adduce two aggravated cases, in which the fatal consequences could not be averted by the best efforts of the surgeon. The details were drawn up by Mr. Holmes, surgical registrar to the hospital; and the post-mortem examinations made by Dr. Ogle and Mr. Gray, conservators of the museum.—*London Lancet*.

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### Prolonged Gestation.

REPORTED BY J. J. CHISOLM, M. D. (CHARLESTON, S. C.)

Towards the close of July 1843, I was requested to see a healthy, robust servant girl, aged eighteen, of good constitution, whose abdomen was rapidly enlarging, unaccompanied by pain or even uneasiness, caused from sudden cessation of her menses, five months previously. She considered herself dropsical, which alarmed her owner. Suspecting pregnancy, no treatment was instituted except mild laxatives to obviate costiveness, from which she was suffering.

Leaving the city for the summer months, I heard no more of the case, till my return, when I was requested to attend the girl in her delivery, she having confessed her condition when it could no longer be concealed. Towards the end of November, she having, as she supposed, arrived at full term, was attacked with cramps in the abdomen and pain in her back, which lasted an entire day, when they disappeared. In December the pains and cramps returned with greater severity—so much so, that the patient was crying all the day of the pain. These also disappeared, and an interval of a fortnight elapsed, when, in the early part of January, a return of the pains brought on a tedious labor. The enormous size of the child induced me to weigh it on the second day after birth, when, to my surprise, it weighed fourteen pounds—duplicates of its clothing weighed eight ounces, leaving thirteen and a half pounds as the net weight of the infant. Had it been weighed immediately after birth, it would have been heavier, as it had several copious evacuations and had taken no nourishment.

The case is interesting, from the circumstance of gestation having been prolonged nearly two months over the time,

dating from the first appearance of cramps and pain in her back in November. This is also corroborated by her previous report of suspension of menses in March, which she attributed to taking cold, and still strengthened by the large size of the child—the parent being rather below the medium stature.

*Charleston Medical Journal.*

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### Injection of Ovarian Cysts with Iodine.

Dr. Tyler Smith referred to the remarks recently made by Professor Simpson, at the Medico-Chirurgical Society of Edinburgh, on the successful injection of single ovarian cysts with the tincture of iodine after tapping. Dr. Simpson had now performed the operation many times, and in one case at the end of a year and a half there had been no return of the disease. Dr. Smith described a case of ovarian dropsy under his care, in which he had on the previous Tuesday, with the assistance of Mr. Nunn, drawn off the fluid, and injected four ounces of the tincture of iodine into the cyst. As regards any danger from the operation, the patient had done remarkably well, quite as well as if only ordinary tapping had been performed. The pulse had not at any time exceeded 100. The smell of iodine had been very powerful in the secretions. Both the urine and saliva had darkened silver very readily, showing that iodine had been absorbed, and probably from the peritoneal surface, as it was difficult to understand that the cyst could absorb, or that its injection could be effected, without the entrance of some portion of the tincture of iodine into the peritoneal cavity. The injection of the cyst certainly offered another method of dealing with this formidable affection.

Mr. I. B. Brown remarked that the plan mentioned had been resorted to in Paris in several cases; in only one instance he believed had inflammation, followed by suppuration, supervened, proving fatal to the patient, showing the little liability of the living cyst to be affected by dangerous inflammatory action. Cases so operated upon should be of the simple kind, such as were generally amenable to treatment by tapping, pressure, &c.

Mr. Hancock had known of one case, in which a French surgeon had resorted to the operation in question, the pain resulting from which was so agonizing, that for fourteen hours the patient had to be held by four men; but the patient was ultimately cured of the disease.—*Lancet.*

### Use of Cubebs in Infantile Enuresis.

BY DR. DEITERS.

This author has found cubebs more effectual than any other remedy in curing the incontinence of urine so common among children. This complaint may depend upon atony of the bladder, or on the presence of intestinal worms. In the former case the cubebs acts as a tonic, in the latter as a valuable anthelmintic. The medicine requires to be given in considerable doses; two pinches (*i. e.* a few grains or *Zwei Messerspitzevoll*) for infants, and a half a teaspoonful twice or thrice daily for children of a somewhat more advanced age. Its effect is speedy and permanent; and although occasionally it happens that during its administration the incontinence returns at periodical or irregular intervals, these recurrences gradually become less frequent, and eventually disappear altogether. To effect a radical cure, the author has often found it necessary to continue its use for a period of from three to eight weeks, and he has never observed any injurious effects from its administration.

Deiters observes that he has found the same remedy most efficacious in checking nocturnal emissions in case of spermatorrhea.—*Edinburgh Monthly Journal*.

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### On the Treatment of Choleraic Diarrhoea by Olive Oil.

BY C. RODNEY HUXLEY, ESQ.

For several weeks past I have read many opinions on the treatment of cholera published in *THE LANCET*, all of which have been opposed to the simple means employed in distant parts, and in my own practice, which have effectually and invariably checked the premonitory symptoms in this fearful malady—viz: half ounce doses of olive oil, given every three hours till the diarrhoea ceases. When surgeon to the British seaman's hospital at Lisbon, I had frequent opportunities of testing this invaluable medicine in the most stubborn cases of diarrhoea, and in no instance have I known it fail.

I was induced to adopt this treatment, hearing from an influential merchant in Lisbon of two alarming cases of cholera, both sufferers personally known to my informant, who rapidly recovered by the simple use of olive oil taken as described.

And so surely will it yet be learnt that the remarkable escape of the Jews in seasons of cholera, is attributable to the frequent use of this oil. The fact is so notorious that I am surprised the subject has been passed over as little more than the result of accident.

I will not enter into the philosophy or physiology of this treatment, more than by reference to its invariable effect upon the mucous membrane of the alimentary canal, which is to allay its universal irritation. In this respect, I look upon olive oil as a specific, for it has never failed to check the excess of mucous secretion, so constant a symptom in the first stages of cholera. My conviction is, if you can succeed in soothing the irritation, you check the disorder, and neither cramp nor other fearful symptoms will follow. The danger of the blood ceasing to circulate, owing to the waste of its fluid ingredient, is no longer anticipated, and the patient is soon pronounced out of danger.

In conclusion, permit me to state that my only object in soliciting insertion of these remarks in the *Lancet*, is the conviction, and no less hope, that the treatment by olive oil in cholera will receive, as it merits an universal test.

*London Lancet.*

#### TO APOTHECARIES, MANUFACTURERS OF SURGICAL INSTRUMENTS, &c.

The Medical Society of Virginia will hold its next annual meeting on the 3d of April next, at the society's hall in Richmond, Va. It is proposed to hold a fair on that occasion, of surgical and philosophical instruments, pharmaceutical preparations, &c.

All who may wish to exhibit articles will please send them to Richmond to the care of the chairman of the committee, or deliver them at the society's hall, over Alexander Duval's apothecary store, Main street, on or before the 1st of April next.

JAMES BOLTON, M. D.	} Committee.
W. W. PARKER, M. D.	
W. B. PLEASANTS, M. D.	
JNO. P. LITTLE, M. D.	
N. F. RIVES, M. D.	

**BRAITHWAITE'S RETROSPECT AND RANKING'S  
ABSTRACT.**

It gives us pleasure to inform our subscribers that we have effected a liberal arrangement with the publishers of these journals, by which we are enabled to furnish the Stethoscope, together with either of them, for the sum of five dollars.

Our subscribers have, therefore, an opportunity of procuring, for a moderate sum, a journal especially devoted to the interests of medicine at home, together with one containing copious extracts from the various foreign journals made by men of acknowledged ability.

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**Notice of Dr. Wellford.**

The portrait of Dr. BEVERLY R. WELLFORD will be found in this No. of the Stethoscope.

Dr. W. we believe is a native of Fredericksburg, where for many years past he has been actively engaged in the duties of his profession. He was chosen president of the Medical Society of Virginia in the year 1851. After the reorganization of the medical department of Hampden Sydney College, by which it became an independent institution, he was elected to the chair of Materia Medica, which had become vacant in consequence of the death of the late Dr. Chamberlayne. The acceptance of this professorship caused his removal to this city in the month of October last.

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**Variola and Vaccine Identical.**

From the much labored and candid researches of Thiele and Ceely, it appears without doubt, that the virus of vaccine and variola *are identical*. A large number of cows, carefully inoculated with small pox virus, had pustules, resembling in every respect vaccine lymph—which being again transferred to the human species, produced the vaccine pustule.—*Deutsche Zeitschrift f. Staats arznei kunde*.

The thirty-second annual meeting of the MEDICAL SOCIETY OF VIRGINIA will be held at the hall of the society, in Richmond, on the first Tuesday in April.

It is highly important that the meeting should be fully attended. Members of the medical profession throughout the state who may be desirous of joining the society, should send their names, endorsed by a member, to Dr. R. W. HAXALL, chairman of the committee of nominations.

### Prize Essay.

At a meeting of the Medical Society of Virginia, held in April 1853, the following resolutions were adopted:

1. That a medal or some suitable testimonial, not to exceed fifty dollars in value, be awarded annually by the society for the best Essay upon some Medical Subject.

2. That a committee of three be appointed to examine all Essays that may be offered, and select the one worthy of such medal or testimonial.

At a meeting of the society, held in April 1854, on motion of Dr. Atkinson, it was resolved that the subject of the next Prize Essay should be *Pneumonia*, and the president of the society was directed to appoint a committee of three to award the premium.

In order to carry out the above resolutions, the president of the society has appointed the undersigned a committee to examine such Essays as may be offered on the subject of pneumonia. All communications must be addressed to the chairman of the committee. They must be accompanied by a sealed note, containing the name of the writer and bearing upon its face a motto corresponding to the one prefixed to the Essay.

Unsuccessful Essays will be returned, should the writers so desire. No Essay will be received after the 1st of March 1855.

All communications forwarded by mail must be prepaid.

DAVID H. TUCKER,  
*Richmond.*

JOHN STAIGE DAVIS,  
*University Va.*

JOHN J. THWEATT,  
*Petersburg.*

*April 22d, 1854.*





Wm. of Fitchie & Dunnivant Richmond, Va.

James Beale. M.D.

# THE STETHOSCOPE.

THE PROPERTY AND ORGAN OF THE  
MEDICAL SOCIETY OF VIRGINIA.

Edited by a Committee of the Society.

VOL. V. RICHMOND, VA., MARCH 1855. NO. III.

## Poisoning by Strychnia---The Gardiner Case.

From Notes reported by A. J. SEMMES, M. A., M. D., Physician to the United States Jail, Washington.

As every circumstance connected with the unfortunate and tragic termination of the Gardiner case has now become a matter of general public interest, I herewith enclose a few crude and undigested notes of the case, particularly of the autopsy, made at the time and place of its occurrence.

On the 3d of March 1854, Dr. George A. Gardiner, after a long and tedious trial of fifty days' duration, was convicted in the criminal court of the United States for the District of Columbia, of the crime of false swearing. The sentence was hard labor in the United States penitentiary of the district for the term of ten years.

The prisoner was observed, soon after the rendition of the verdict, to put in his mouth a small white package, and immediately after to swallow, very hastily, a glass of cold water.

He was conveyed to the prison in the custody of one of the U. S. deputy marshals; and about 15 minutes after, while attempting to raise a glass of water to his lips, the arm quivered and became extremely tremulous, and finally came down with much force on the table. He then fell senseless, and reviving slightly, was seized with tetanoid convulsions of a most violent character.

In the mean time, messengers were despatched for medical aid. During my absence, Dr. J. C. Hall, an eminent practitioner in this city, was sent for, who came immediately; and finding the patient repeatedly attacked by convulsions of a peculiar character, suggested the idea of poisoning by strychnia.

By Dr. Hall's direction, ice was applied to the head and leeches to the temples, and the feet were immersed in hot water, &c.

I did not see the patient until two hours after the administration of the poison, and found him in the following condition: The body was alternately rigid, and in convulsions, and on the application of the slightest excitant—as the touch, cold, or a current of air—the spasms would be instantly renewed. The muscles of the back were bent; the face flushed and lips livid; respiration rapid and difficult; diaphragmatic spasm well marked; the intellectual faculties clear and unaffected; the pulse small, then wavy or tremulous.

The peculiar effects of strychnia were manifested by the exquisite sensitiveness of the surface of the body to light, heat and the touch, to such a degree that the simple contact of the ends of the fingers with the skin would excite and renew the tetanic paroxysms.

The opisthotonos in this case was complete and unmistakable, indicating that the strychnia had entered the circulation, and, through it, was then exerting its specific influence on the medulla spinalis and the motor nerves. After several violent paroxysms, the rigidity of the body ceased; the respiration became extinct; the face became livid, and then gradually assumed a pale, ashy hue; the eyes fixed, and the pupils dilated. Death closed the scene three hours after the ingestion of the poison.

Desiring to obtain the assistance of older and more experienced heads, I invited Drs. Miller and Stone to conduct the post-mortem examination of the body, both on account of the importance of the case to the government, and of their being able and accomplished experts. The examination was commenced 18 hours after death.

I insert here our notes, as prepared for the coroner's jury. *Autopsy* of Geo. A. Gardiner, ætat. 36, (who died at the U. S. jail March 3d, 1854, at twenty minutes past 3 P. M.) made in the United States jail, Washington, District of Columbia, by Dr. Thomas Miller, professor of anatomy in the National Medical College, Dr. Alexander J. Semmes, physician to the U. S. jail, and Dr. R. K. Stone, professor of physiology and microscopical anatomy in the National Medical College, in the

presence of J. D. Hoover, Esq'r, United States marshal of the District of Columbia, and of Drs. Hall, Tyler, Johnston and others.

*External Appearances of Body.*—Rather emaciated. Face, neck and back livid; front of the body waxy and pallid; body extremely rigid; deep indentations on the right forearm, from the pressure of the indicator, medius and thumb of the opposite hand; cuticular abrasion of the left leg in the anterior and internal tibial region, about five inches long by one and a half inches wide—fingers and thumbs were very livid; half flexed and slightly elastic.

*The Head.*—Scalp much congested; the diploe congested, and a discharge of serum as soon as the saw had passed through the external table; meninges of the brain highly congested; the tissue of the brain and spinal marrow presented no abnormal appearances; the arachnoid a little milky in parts. A few minutes after removing the brain, by the necessary division of the medulla spinalis, there was a very copious flow of highly carbonized blood from the base of the cranium and the spinal canal. There was also a trace of a turgescence of the velum interpositum and choroid plexus hardly worthy of notice. The investing membrane of the upper portion of the medulla spinalis, at its junction with the medulla oblongata, appeared to be slightly vascular.

*The Thorax.*—Heart small, contracted, and contained no blood, and is perfectly normal.

Lungs healthy; hypostatic congestion to a slight degree posteriorly.

*The Abdomen.*—Omentum contained an unusual quantity of fat, having regard to his external appearances.

Stomach and duodenum were carefully ligated and removed, together with the liver, and placed in the hands of Drs. Breed and Steiner, chemists, for chemical examination. Of course, no other examination than an external one was made.

Intestines normal, though somewhat pale in their mucous coat; colon greatly contracted, being not more, throughout its entire length, than three-fourths of an inch in diameter; contents of the intestines below duodenum, small in quantity, but natural in appearance.

Liver, external appearance and size natural and healthy; gall bladder natural in size, and about one-third filled with bile. The gall bladder was, of course, not opened.

Spleen small in size, but natural in appearance.

Pancreas perfectly natural.

Kidneys natural in size, but highly congested.

Bladder distended to about  $\frac{1}{3}$ d of its capacity with urine.

The stomach, liver and portion of the duodenum, together with a white powder found in the pocket of the prisoner, were submitted to my friends Dr. Breed, chemical examiner U. S. patent office, and Dr. Lewis H. Steiner, professor of chemistry in the National Medical College, for examination.

These gentlemen have made a careful and elaborate analysis, of which the result only was communicated to the coroner, viz :

LABORATORY OF U. S. PATENT OFFICE,  
*Washington, D. C., March 10, 1854.*

To Thomas Woodward, Coroner, and  
P. Barton Key, District Att'y of the U. S.

GENTLEMEN—Having, in conformity with your instructions, instituted a careful investigation of the contents of the stomach of the late Dr. Geo. A. Gardiner, and also of the powder found in his pocket—both submitted to us by you on the 4th inst.—we hereby report that in the stomach we have detected substances affording the chemical reaction characteristic of strychnine and brucine; and from the large portion of the contents of the stomach not yet completely analysed, we are convinced that these virulent poisons are present in quantity more than sufficient to have produced death.

The powder found in the pocket of the deceased has proved to be “commercial strychnine,” or, chemically, a mixture of that poison with brucine. According to the tests for these alkaloids, as given by the most eminent toxicologists, the weight of this powder is ninety-five milligrammes.

We would also mention that we have found in the stomach several pieces of paper, one of which was folded in the manner in which druggists wrap up powders.

(Signed)

DANIEL BREED, M. D.  
LEWIS H. STEINER, M. D.

I understand that these gentlemen are now engaged in the prosecution of some investigations relative to strychnine, which are of much interest. I am confident that I am only expressing the desire of the profession, that the results of these experiments be communicated for publication.

Among other effects of strychnine noticed by observers, Majendie\* mentions that the nitrate of strychnia causes the most perfect liquefaction of the blood.

\* Lectures on the Blood, delivered in the College of France—1837-38.

An interesting case of poisoning by *nux vomica* is reported by Dr. Dunbar Thompson,\* of a young woman admitted in the University College Hospital.

Orfila† says that the numerous autopsies of animals poisoned by strychnia, brucia, and upas-tiente, indicate that the appearances are the same as those noticed in the bodies of those who die from asphyxia, and that no trace of any lesion of the intestinal canal has been observed. But he cites instances where the membranes of the intestinal canal exhibit the effects of inflammatory action from the administration of *nux vomica*.

Experiments performed on living animals demonstrate:

1. That strychnia, brucia, etc. are extremely poisonous to man and most of the lower animals.

2. That the action of brucia is twelve times less energetic than strychnia.

3. That these poisons are *excitants*, and produce tetanus, immobility of the thorax, consequently asphyxia, to which all animals succumb.

And it is further stated that the local irritation produced by the salts of strychnia is not the cause of death.

Majendie is of opinion that it acts primarily and specifically on the spinal marrow. He thinks this is conclusively proved by the poison not acting on animals whose spinal cord had been removed.

M. Flourens‡ considers that strychnia exerts its action specially on the medulla oblongata.

Dr. Marshall Hall§ performed a series of interesting experiments on a frog, from which the cerebrum and cerebellum were removed; on the skin of which he applied five drops of a solution of acetate of strychnia, ( $\frac{1}{8}$ th of grain.) In five minutes, he says, the animal was brought under its influence; and when it was suffered to remain alone, untouched, unshaken, absolutely unexcited, it remained tranquil; but when a jar was given to the plate on which it rested, it was thrown into a state of rigid tetanoid spasm; the limbs were extended and agitated. The paroxysm passed over; it sank into a state of relaxation. The animal remained motionless until disturbed. The *vis nervosa*, as he styles it, is in a state of static equilibrium, unless that equilibrium be disturbed and changed into a dynamic force by some cause of excitation.

These phenomena correspond in every material point with

\* London Lancet, Vol. xxxvii—1839-40.

† Traité de Médecine Légale, Tom. iv—Paris, 1848.

‡ Recherches Expérimentales sur les fonctions du système nerveux.

§ Lectures on the Nervous Diastaltic System—London Lancet, vol. 1—1850.

the symptoms exhibited in Gardiner's case. There was the same tetanoid spasm and rigidity, the same exquisite sensitiveness; the slightest touch or jar would throw him into convulsions.

Strychnia exerts no influence on the brain. No decided cerebral lesion has been established as resulting from the effects of this substance. It acts specifically on the spinal cord. Marshall Hall's experiments conclusively show that it acts more specially on the origins of the esodic excitator nerves independent of the cerebrum and cerebellum. There is an exaltation of excitability in the centre of the diastaltic system. He further says that the tetanoid state induced by strychnia is one of poisoned blood, acting on the spinal centre, inducing there exalted excitability, but not necessarily, or without an excitant, a state of tetanus or spasm. The case is tetanoid, a state *full* of tetanus, without being tetanic. These are Marshall Hall's views in his own peculiar, quaint, but expressive words.

But death does not always take place by tetanus. In some cases the departure of the convulsions has been followed by a fatal state of general and indescribable exhaustion, and appearances after death are seldom left; like any obstructions to respiration—venous congestion—*after death* the membranes of the spinal cord are *highly injected*; *fluid* blood flows in abundance from the spinal cavity—*heart* and great vessels flaccid, and contain scarcely any blood.\*

In a case of poisoning by strychnia, examined by Orfila and Barruel,† *the spinal plexus of veins* was slightly gorged, the pia-mater red and injected, and the substance of the cerebrum soft, and presented a number of spots—the lungs were gorged with black fluid blood.

Majendie‡ has seen a contracted state of the *spleen* consequent on poisoning by strychnine.

In another case, where two scruples of *nux vomica* were administered, death resulted in 1½ hour; and on examination, 2 quarts of fluid blood escaped upon opening the vertebral canal.§

\* Cases of Drs. Booth and Blunhert, in Treatise on Poisons by Dr. Christison, London.

† Archives Générales de Médecine—Paris.

‡ Formulaire Majendie, sec. 11—Paris.

§ British Annals of Medicine, vol. 1, and London Lancet, vol. xxiv.

For the Stethoscope.

### Treatment of Gonorrhœa---Clap.

MESSRS. EDITORS—Two very aggravated cases of gonorrhœa have recently been cured, under my observation, by the simple injection of a saturated solution of common alum up the urethra, by a common penis syringe. The application was made morning, noon and night. The offending organ was bathed frequently during the day in ice water; and its painful turgescence at night was subdued by wrapping it in a cotton cloth dipped in ice water, and renewed when it became warm. The diet was light and chiefly of vegetables. Cold water was drunk very copiously during the day, and produced a free flow of urine.

The cure was effected, in both cases, in from two to three weeks.

This treatment is so much simpler, cheaper and more agreeable than the ordinary one, that I cannot help recommending it, as an experiment, to the faculty and to the afflicted.

PHILO-MEDICUS.

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### Bellevue Hospital Report.

#### *Fracture of Cranium—Removal of Bone—Death from Secondary Hæmorrhage.*

——— colored boy about 12 years of age—in good health—employed as a hostler on a canal boat—was found lying in the boat, with fracture of the cranium behind the ear, from the kick of a mule.

The fracture appeared to be in the upper portion of the mastoid part of the temporal bone, which was depressed at its upper margin to the full extent of its thickness. Although the patient was in the full possession of his faculties, yet considering the amount of the displacement of bone and its probable pressure upon the lateral sinus, I regarded an operation as imperatively demanded. Accordingly I removed a small piece of the sound bone overhanging the depressed portion, passed an elevator through the aperture, and succeeded in relieving the depression. The operation was one of extreme

delicacy, in consequence of the lateral sinus lying beneath the place of injury ; and this was an additional reason for preferring elevation to removal. In consequence of the denudation of the pericranium, I feared the removal of the injured portion of bone would become necessary.

Six days afterwards my fears were fully realized. The bone became necrosed, and I removed it, but not without serious apprehensions of wounding the lateral sinus. This danger, however, was passed safely, and the patient did well until the morning of the fourteenth day, when on making my usual visit, I discovered the patient was dead, and the body was still warm. On enquiring of the nurse when death had occurred, I learned that he was ignorant of the fact ; that he had seen the patient but a few minutes previously, and had been asked by him for some delicacy which had been promised.

An examination of the corpse soon revealed the cause of death. A pool of fresh blood was found in the bed adjacent to the place of injury. A post-mortem examination showed that the lateral sinus had been opened by ulceration, and hence the fatal hæmorrhage.

The result, although unfortunate, proved the propriety of the early operation ; for if ulceration be liable to occur in such cases after the removal of the depressed bone, much more likely is it to be occasioned by the continued pressure of a rough fractured edge. B.

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### **Tax on Physicians.**

At the annual meeting of the Medical Society, held in the month of April 1853, a resolution was adopted, authorizing the executive committee, if in its judgment it was thought to be "prudent and necessary," to resist the law requiring physicians to pay the tax prescribed by the legislature, and to lay the whole matter prominently before the profession. A day or two prior to the passage of this resolution, the written opinion of an eminent gentleman of the bar in this city was procured, and read to the society. His opinion was opposed to the constitutionality of the law imposing the tax, and we presume the resolution referred to above met with the appro-

bation of the society, in consequence of the opinion which had been obtained. The matter was elaborately argued by the gentleman who was consulted, and he appears to entertain no doubt as to the validity of the views expressed. He concludes his remarks, however, in these words: "I know, too, how reluctant the courts are to declare acts of the legislature to be in violation of the constitution. It is, therefore, not improbable that my opinion will not be in accordance with that of the courts."

The executive committee, we think, have never taken any action on the subject. Whether its members were discouraged from so doing, by an idea of the utter hopelessness of success, if the law was submitted to the decision of the courts, or whether none could be found who felt sufficient interest in the matter to prosecute it to the end, we cannot say. It is, however, of some importance to the profession; and as the Medical Society will hold its annual meeting in this city at no long period from this date, we have thought some benefit might result, by again arousing attention to it.

We feel no hesitation in admitting our incompetency to argue this question in a legal or constitutional point of view; for we have not been educated in all the subtleties of the law, nor are we sure, that by indulging in such a train of remark, any new zeal would be infused into the minds of those to whom the subject may hereafter be committed. If it is ever to be submitted to judicial investigation, minds imbued with the acutest legal acumen must be enlisted in the controversy.

To the medical men of this city, the imposition of this tax is at this time invested with an increased degree of importance; for not only is it to be paid to the state, but by an ordinance of the council, passed on the 11th day of January last, the same amount of taxation is levied upon the physician's earnings, for the benefit of its treasury. Here then is a double tax for the exercise of a profession, the laborious duties of which are but too often rendered without fee or reward. We refer not to those who are able to offer remuneration for services, but yet choose not so to do—there are such persons in

every community—but to those whose extreme poverty places it beyond their power. Now it does seem to us not unreasonable, that such a consideration ought to have caused the council to hesitate in imposing an additional tax. We think so for the reason that all medical service rendered to such as are really unable to pay for it, is a direct and positive saving to the city. Suppose the physician could divest himself of every feeling of humanity, and relentlessly turn his back upon all persons who were unable to remunerate him. Would this class of our population be left to die in the streets? Heaven forbid; but something must be done: and in the absence of dispensaries where the poor can be gratuitously prescribed for, we see no other refuge for them than the wards of the poor-house. There provision would be made, it is true, and as they cannot live upon air even while sick, an additional expenditure must necessarily be incurred by the city. As the matter now stands, this expenditure is virtually borne by the medical profession within its limits.

But with this particular feature of taxation imposed upon us, the Medical Society has nothing directly to do. If its fellows think proper to resist, by legal measures, the tax levied upon them by the state, and should be successful in this resistance, we take it for granted that in such an event the corporate authorities of the city would find it impossible to contravene the decision of the courts. Shall we, the physicians of Richmond, take action in the premises, or shall we quietly await the action of the society?

Suppose the matter be decided against us. Should it ever be brought before a judicial tribunal, there yet remains one source of partial relief at least, if indeed we shall be able to succeed in that. If we are thus to be hampered by an exorbitant demand upon our earnings, is it unreasonable to ask for some protection in the exercise of our calling? The legislature, it is true, has done little or nothing to protect the interests of our profession; but if now this body shall think fit to exterminate the quacks and charlatans who practice upon the credulity of our people, the burden of which we complain will no doubt be patiently borne.

But after all, the most potent means of relief would seem to rest mainly within ourselves. Let us put aside all jealousies and party animosities, if such should exist among us, and let us unceasingly strive to obtain what has so often been urged by others who deservedly stand high in our ranks, viz: a board of medical examiners for the state. Such a board can be so constituted, we think, as not to interfere with the interests of any school or any class of physicians; no, not even of the *irregulars*, who may now be pursuing their trade among us; for it will possess no retrospective action, but will look solely to the future. If with an unanimity unbroken and decided, we ask such a boon of our legislature, it will hardly be denied to us. Give us such a board, and in time to come, the practice of medicine will be entrusted to worthy hands, and a fair remuneration for services rendered will be the reward of science and skill.

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### Medico-Chirurgical Society of Richmond.

*Efforts to revive it. Asthenic Condition. Causes. Want of Professional "Esprit-du-corps." Prof. Seguard—his Remarks on the Pathology and Treatment of Epilepsy.*

An effort has been made by the friends of medical organization to revive this society, which we cordially wish may prove successful. Notwithstanding the punctual performance of duty by the secretary in summoning the members bi-monthly, no meeting has been held during a period of about seven months. A few active members at length succeeded in gathering a quorum, and it was determined either to dissolve the society, or to make a renewed effort to carry it on more vigorously.

For the purpose of testing the question, Dr. Gooch offered a resolution dissolving the society, appointing a committee to wind up its affairs, and declaring that there did not exist sufficient *esprit-du-corps* among the medical profession of Richmond to sustain any medical organization.

During the discussion which ensued, it was shown that only about one-half the profession of the city had ever united with

the society, and that it had been very badly sustained by its members *in every way*. Its records showed that some half dozen, who had regularly attended the meetings during the time when they were held, had in fact kept the society in existence.

Such an exhibit is certainly disgraceful to the profession. We ask in vain for an explanation which the profession will acknowledge to be the true one. Have they any fault to find with the principles of the organization? They are similar to those of the state society, and were adopted by a primary meeting, after free and lengthened discussion. Is the society objectionable on account of the character of its members? We are sure this excuse will not be urged. If it be not as respectable and well behaved as some would have it, why do not *the respectable and well behaved outsiders* unite with the society and improve its character and conduct? We fear the true secret is, that many of the profession are either opposed to organization, because it might clash with some selfish interest, or that they feel no concern about it whatever.

The resolution of Dr. Gooch was, at his own instance, voted down, and Dr. E. B. Sequard, professor of institutes, &c. in the medical college of this city, was invited to deliver an address on some subject which he might select. To this invitation Dr. Sequard very politely acceded, and engaged to offer some remarks at the next meeting on the physiological and therapeutical effects of galvanism. The secretary was accordingly directed to issue a public invitation to the profession generally to attend the next meeting.

Owing to the indisposition of Dr. Sequard, it was feared he would be unable to attend, and in consequence, the public notice was not given. Still, we do not regard this omission as offering a sufficient excuse for the miserably thin attendance of members.

Dr. Sequard courteously acceded to the request of the members present, to postpone his remarks on the subject selected, and offered instead some deeply interesting remarks on epilepsy, an imperfect sketch of which we give below.

The meeting last Tuesday night (20th) was again very thinly attended, and a considerable proportion of those present were visitors! It is true, that there were several other attractions on that night, but none of them were of such a character as we feel disposed to admit as offering a valid excuse for the thin attendance. We think courtesy to the stranger who was invited to deliver the address, ought to have set them all aside.

In regard to the speaker, our impressions were of the most

favorable character. Malgré his decided foreign accent and idiom, we found ourselves following him through his address with a great readiness, owing to the clearness of his own ideas, and his earnest efforts to convey them to his audience. His premises were well stated, and his conclusions were logically drawn with caution and fairness. While listening to him we were impressed with the conviction, that whether his views were correct or not, they were the results of an honest, zealous investigator of nature's laws—more zealous for truth than for favorite hypotheses.

It gives us pleasure to inform our readers that he has promised to furnish for our pages the outline of his remarks at the last meeting of the society.

Dr. Sequard remarked :

When a section was made of one-half of the spinal column of animals, they had symptoms resembling epileptic fits. When they were confined in a small space, and supplied with an abundance of food, these fits were increased. When on the contrary, they were placed in a large room and supplied with a smaller quantity of food, the fits were diminished. In the former case muscular action was restrained, in the latter they were excited to exercise—chasing each other for the small pieces of food occasionally thrown among them. A similar diminution of fits was produced by galvanism increasing muscular action. The lower part of that side on which the section was made became more sensitive, and by pinching it the fits were reproduced.

This led Dr. S. to consider Marshall Hall's proposition of tracheotomy for the relief of epilepsy. Now this is a serious operation. It is frequently fatal from inflammation of the veins or bronchial tubes. It is therefore better to devise some other mode less dangerous. During an epileptic fit the larynx is spasmodically closed. This produces asphyxia, which is the cause of the convulsions, probably by throwing a current of carbonized blood upon the spinal cord and medulla oblongata. In epileptics, the nervous system is very excitable. According to Marshall Hall, the fits are often produced by extraneous causes.

Dr. Sequard has been led to attempt the cure of epilepsy by exciting the nerves of the larynx. The researches of himself and others have shown that exciting the nerves in the neighborhood of muscles having a spasmodic tendency, will prevent spasm. On cauterizing the throat of the animals experimented on, as first described, the epilepsy disappeared.

Subsequently, Dr. Green of New York stated, in one of his

lectures, that he intended to have performed tracheotomy that day in a case of epilepsy, but he had changed his mind, in consequence of the nonappearance of the symptoms for a period of three days, although the patient had had an attack every day for several years. The only explanation he had to offer was, that three days before he had occasion to cauterize the larynx for some morbid condition of that organ. Dr. Green repeated the cauterization, and considers the patient cured. Dr. Marshall Hall afterwards examined this patient, and did not think him cured. Others have tried the same treatment, but Dr. Sequard does not know all the results. Dr. Bowditch tried it, and most of his cases improved—Dr. Cleveland also, with the like result. A quack tried the same method, and as he reported, with success.

In one case treated by Dr. Sequard, the patient had a fit before the 30th day of each month. After the 14th day threatening symptoms appeared. He then cauterized the larynx; and in order to give the patient every chance, administered oxyde of zinc. The patient has been cured for three years, but in consequence of the use of other means, he could not say that the cure was effected by cauterization alone. The patient has had a slight attack since, which Dr. S. witnessed. His fits used to occur during the night, and caused great annoyance at the hotels where he boarded, and had they continued, Dr. S. would probably have heard of it.

One of Dr. S.'s pupils cured a case in Paris, and the cure had lasted a year when last heard from. He has been informed of another case in which this treatment appeared to have been successful, but there is some doubt about it—a friend having mentioned that he had observed some slight movements.

Dr. S. stated frankly, that he was not yet prepared to say how far he could recommend this treatment. These are the only decided cases out of ten of which he has been informed. In another case there was evident improvement, but whether it were due to physical or moral causes, he would not undertake to say. Another case is now under the care of Dr. Gurney Smith. The fits are not so frequent, but they are quite as violent. Dr. S. therefore cannot recommend the treatment as very efficacious.

The strength of the solution used by Dr. S. was  $\frac{1}{4}$  nitrate of silver to  $\frac{3}{4}$  water. The stronger the solution the less pain it produced.

Epilepsy may be produced by disease of the nerve centre or its periphery. In the latter case there is a better prospect of cure. If, for example, it be produced by a tumor pressing

upon a nerve, it may be cured by cutting the nerve between the tumor and the spine.

Maisonneuve states, that epilepsy is produced by a variety of causes, and if we can detect the organ at fault, we may cure it. He has published cases caused by gastralgia, and if the latter be cured, the effect is similar to that of cutting the nerve. So also it is sometimes produced by disordered menstruation. In these cases, if we cure the remote cause, we cure the disease.

Dr. Hall regards epilepsy from physical causes as incurable, and yet the cases of animals operated on by Dr. S. were precisely of this sort.

One writer has observed in most instances organic disease of the spinal marrow, but these observations were made in lunatic asylums, where such cases were most likely to be sent.

The cauterizations should be applied daily, and especially when there are premonitory symptoms. In one case Dr. S. applied it daily for twenty days, laid it aside for 14 days, and then resumed it again. He used it altogether about two months.

Dr. McCaw stated, in confirmation of the views of Dr. Sequard, that a case of epilepsy had been recently reported to him by a gentleman in the country, in which amputation of the leg became necessary from some cause, and that no attack of the disease had occurred since the amputation.

NOTE.—We must offer our inexperience in reporting as an apology to Dr. S. and to our readers for furnishing so imperfect a sketch of these highly interesting remarks. B.

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### Bibliographical Notices.

From Mr. Geo. M. West we have received a little volume of *Essays on Infant Therapeutics*; to which are added *Observations on Ergot*; *History of the Origin of the Use of Mercury in Inflammatory Complaints*; together with the *Statistics of the Deaths from Poisoning in New York in the years 1841, '2 and '3*. By JNO. B. BECK, Prof. of *Materia Medica and Medical Jurisprudence* in the College of Physicians and Surgeons of the University of the State of New York, &c. &c. Second Edition.

This is a small volume, composed of eight essays upon the different subjects selected, with an appendix of cases. We have read it with some care, and would unhesitatingly advise

all *beginners* in the practice to do so likewise; for although there may be nothing very original in the views of the author, yet there is so much of caution recommended in the administration of certain remedies to infant patients, and the reasons for this caution are so clearly set forth, that we are confident much benefit will accrue especially to those who are just entering upon the duties of their profession.

The first essay is upon the effects of opium on the young child. After discussing the subject under the three heads of the difference in the physical organization of the infant and the adult, the difference in the temperament of infants, and the actual state of the system as to disease, the author reaches the conclusions, that opium should be employed as little as possible in infantile diseases, and that much caution should be used as to the form of its administration. He recommends the article to be used in the *commencement* in very small doses, in order to watch its effects, and these doses to be repeated at sufficiently long intervals.

The effects of emetics are discussed in the 2d essay. It is admitted that young children vomit much more readily and easily than adults, so far at least as the mere *mechanical act* of vomiting is concerned, and hence is argued the impropriety, unless under very peculiar circumstances, of exhibiting emetics of an *active* and *debilitating* character. They produce great nausea, and their effects are entirely too energetic. In this paper the author chiefly inveighs against the employment of the antimonial emetics.

In the third essay the effects of mercury upon the young subject are noted. One peculiarity, and a very striking one, is, that in such patients it very often produces no salivation; but yet "notwithstanding this, it cannot be doubted that it affects the system profoundly, and even more so proportionally than it does that of the adult." Hence very great caution should be exercised in its administration, as its effects are sometimes disastrous.

The effects of blisters are spoken of in the fourth essay. The peculiarities in the action of this remedy are, that in young children their action is very speedily produced—that the inflammation engendered is sometimes very severe, and is occasionally followed by ulceration, gangrene and even death; and it is believed that the constitutional excitement produced by this remedy is generally greater in children than in adults. Blisters of course are not proscribed, for they are often of essential service; but the time they should be permitted to remain and the mode of their application should be carefully attended to. A few pages are devoted to these two points.

The effects of blood letting on the young patient are detailed in the succeeding paper. Several peculiarities are mentioned, the first of which is that children do not bear the loss of considerable quantities of blood, as well as adult subjects do; that their nervous system is more powerfully affected by such losses, and that a repetition of the bleeding is but illy borne by them. Our author advises the exercise of great caution in bleeding children to the point of syncope, and gives us many judicious hints as to the application of leeches.

In the sixth essay we have his observations on the use of ergot. He does not agree with the few who believe that this article is destitute of the property which has been ascribed to it, and thinks that in view of its decided influence upon the uterus, its administration is invested with a moral as well as a professional importance. In answer to the question, To what extent are we justified in using ergot? believing as he does that it may exercise an influence prejudicial to the life of the infant in utero, he replies, "in a professional as well as moral point of view, we have no more right to trifle with the life of the child than we have with the life of the mother. When, however, from the nature of the case it becomes manifest that the life of the mother is in danger, we are not merely justified in using, but it is a positive duty to do so, every means to save her, disregarding every consequence that may result to the child."

The origin of the use of mercury in inflammatory complaints is treated of in the seventh essay. After referring to the knowledge which the ancients possessed of this article, we are informed that *calomel* was first described by Crolius in the year 1608. For a long time the preparations of mercury were confined to the treatment of venereal diseases. The use of calomel in inflammatory affections is ascribed to the "enterprise of American physicians." More than a century ago it was first prescribed, according to our author, in the state of New Hampshire, in an epidemic sore throat.

In the eighth and last paper, a table is furnished of the "deaths from poisoning in the city and county of New York during the years 1841, '42 and '43."

We have thus given a very partial glance at the contents of this little volume. You may read it through in four or five hours, and we do not think you will rise from its perusal with regret. H.

*A Dictionary of Medical Terminology, Dental Surgery and the Collateral Sciences.* By CHAPIN HARRIS, M. D., D. D. S. &c. 2d ed. Phila : Lindsay & Blakiston. Svo. 800 p.

From A. Morris, Richmond, Va.

*The Anatomy, Physiology and Pathology of the Human Teeth, with the most approved Methods of Treatment, including operation sand the Method of making and setting Artificial Teeth, with thirty Plates.* By PAUL B. GODDARD, M. D., &c. and JOSEPH E. PARKER, Dentist. New York : S. S. & W. Wood. Folio, 227 p.

From Geo. M. West, Richmond, Va.

We have been highly gratified by observing the efforts of scientific men to rescue dentistry, a branch of minor surgery, from the hands of ignoramuses and unprincipled charlatans. Our legislature has wisely prohibited foreign peddlars from swarming over our state and draining her resources—swindling the people—destroying the business of the merchant and mechanic and impoverishing her treasury for the benefit of others—it may be her worst foes. But at the same time she shamefully traffics with these foreign imposters in matters affecting the health and lives of her citizens. For a *consideration*, she sells licenses to any and every body to practice dentistry and medicine without stopping to enquire whether they are ignoramuses, swindlers, seducers or murderers.

We feel almost disposed to issue a public advertisement, inviting these scoundrels to come in swarms to our state, and avail themselves of our laws, as the most efficacious means of compelling our law makers to abate the nuisance.

We have among our dentists in this city and in other parts of the state men of science, skill and integrity, whom we feel proud to acknowledge as auxiliaries in the cultivation of medical science; and we cannot but feel indignant that they should be placed on the same footing by law with every traveling pretender who may filch the title of dentist. To be an accomplished dentist, it is no longer sufficient to be able to draw and plug teeth. It is necessary to understand their structure, diseases and treatment; and this knowledge requires an elementary education in medicine and natural science. To all who have this high aim, we recommend the works before us.

Dr. Harris has exhibited good judgment in the plan of his dictionary. The definitions of terms belonging to medicine and the collateral sciences are clear and concise, while the articles in regard to denistry proper are very full and com-

plete. The copious and elegant formulæ for dentifrices and odontalgic applications commend the work to apothecaries, who would doubtless find these alone worth the cost of the book. The work is gotten up in excellent style by the enterprising publishers. We advise every dentist, and every physician who may feel an interest in dentistry, to place a copy upon his table. The work of Goddard and Parker is a very elaborate treatise in regard to every department of the science and practice of dentistry. We have read with much interest the chapter on the development of the teeth, from Goodsir's *Researches*, and we have been greatly assisted in forming clear conceptions of our author's meaning, by the very beautiful illustrations appended. In regard to practical dentistry, we find full directions for extraction, filling and replacing teeth, which may have been lost by artificial substitutes. On these subjects, Mr. Parker deserves much credit for his honorable liberality to the profession, in contributing "the desired information, without withholding what is too often retained by individuals as among the secrets of the trade."

The illustrations are numerous, and elegantly executed. Many of them are original, and drawn from nature.

We especially commend this work to dentists residing at a distance from cities, and who are compelled to prepare their own *matériel*. B.

*The Dublin Dissector, or Manual of Anatomy, comprising a Description of the Bones, Muscles, Vessels, Nerves and Viscera, also the relative Anatomy of the different Regions of the Human Body, together with the Elements of Pathology.* By ROB. HARRISON, A. M., &c.—3rd American edition, &c. By ROBERT WATTS, j'r, M. D. Professor of Anatomy in the College of Physicians and Surgeons N. Y. New York: Samuel S. & Wm. Wood. 1854. 8vo. 541 p.

From Geo. M. West, Richmond.

We greet the work before us as an old and valued friend. It was our constant companion and guide at the dissecting table, and our experience enables us to recommend it cordially to every student of anatomy. While it was an anonymous publication, it attained so high a reputation that when Prof. Harrison claimed its authorship, he could do so with just pride. The American editor, our friend Prof. Watts, the accomplished lecturer on anatomy at the College of Physicians and Surgeons, has performed his task well. He has interspersed the text with concise, instructive annotations, without displaying his name in gilded characters upon the binding. B.

*A Manual of Pathological Anatomy.* By C. HANDFIELD JONES, M. D., F. R. S., &c. and EDWARD H. LIEVEKING, M. D., &c.—*First American Edition, revised, with three hundred and ninety-seven Illustrations.* Philadelphia: Blanchard & Lea. 1854. 733 p.

From Geo. M. West, Richmond Va.

The work before us is one of unusual interest and value. While its authors acknowledge that they have availed themselves fully of the results of the labors of others, they have endeavored, as far as possible, to investigate for themselves the correctness of the opinions which they have advanced. While, therefore, the work possesses the merit of being a compilation of modern views of pathology, at the same time it possesses the merit of originality.

The American publishers have enhanced the value of their edition, by greatly increasing the copiousness of the illustrations, by selections from the best authorities, made by a competent hand, and by the addition of "an account of the interesting microscopical observations of Donaldson of Baltimore, on the characteristics of the cancer cell."

We urge upon our readers and the profession generally the importance of informing themselves in regard to modern views of pathology, and recommend to them to procure the work before us as the best means of obtaining that information.

B.

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We have received from the publishers, Samuel S. & Wm. Wood, No. 261 Pearl street, New York, through Mr. Geo. M. West, *Materia Medica and Therapeutics.* By MARTYN PAINE, A. M., M. D., &c.

The author has not only endeavored to divide and arrange the materia medica into classes, but by the arrangement of the articles of each class, to indicate their therapeutic values. But it is evident that every such arrangement must be in a great degree arbitrary.

The work is a condensed one, and as a book of reference is convenient.

It is for sale by Mr. Geo. M. West. L.

*Table of Urinary Deposits, with their Microscopic and Chemical Tests for Clinical Examinations.* By JOHN KING, M. D., Cincinnati Ohio.

This is a well executed and exceedingly convenient table of reference, with illustrations. It is printed upon a single sheet of paper, and may be pasted upon cloth and hung upon the office wall. It may be procured of the author, for the moderate sum of fifty cents per copy. B.

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### Use of Chloroform in a Case of Puerperal Convulsions.

BY DR. J. R. BOWLER, OF BEARDSTOWN, ILLINOIS.

September 15th, 1854, Mrs. Hageman, aged eighteen years, after a natural and rather easy labor, under the care of Dr. Sprague, was delivered of her first child. Between two and three hours after delivery, she was seized with convulsions, which continued to recur every twenty or thirty minutes, attended with strong muscular contractions—eyes rolled up; clenched jaws; (tongue having been bitten in first fit, was afterwards guarded by substances interposed between the teeth;) face bloated; breathing stertorous; frothy saliva issuing from the mouth, a gush of it being expelled at the commencement of each fit; unconscious in intervals of paroxysms. Such were the facts of the case, when seen by me, about nine hours from the commencement of the convulsions. Dr. Turpin and Ehrhardt had preceded me in the consultation. The treatment adopted had been bleeding, cold to the head, sinapisms to legs followed by the administration of opium, and other anti-spasmodics—all to no effect as to any controlling influence in the case. The effect of a further loss of blood was agreed to be tried between myself and Dr. S., (the other doctors being absent at the time.) The old orifice was reopened, and near a pint of blood allowed to flow, when the faltering beat of the pulse gave us warning to desist from any further draft upon the sinking powers of life. After a short delay, for deliberation, the paroxysms had increased in frequency and deadly force. The symptoms seemed to indicate impending dissolution, without the interposition of some powerful agency to arrest the march of disease. Re-

collecting to have seen some recent notices of the successful use of chloroform in the treatment of puerperal convulsions, I was led to propose the use of that agent in the case. Meeting the approval of Dr. S., it was applied, just as she was coming out of a severe fit. Under its influence, the muscular contractions and twitchings calmed down; breathing became less sterterous and labored; all painful symptoms soon disappearing. She was kept under the influence of the anæsthetic from the time of its first application, five o'clock, P. M. until midnight, at which time its use was discontinued—Dr. Ehrhardt having remained from eight o'clock, P. M. to keep up the impression of the remedy. The natural sensibilities had returned at the end of some three hours. There had been no return of the convulsions from the time of the application of the chloroform. As the sensibilities returned, there were some muscular twitchings and nervous jactitations, which were relieved by a few partial applications of the remedy, during the forenoon of the succeeding day. There seemed to be nervous depression and some confusion of the intellect for about two days, attended with some feverishness, which passed off by the use of a cathartic and light diaphoretics.

I propose to offer no theoretical views in reference to the pathology of the disease in question, nor of the *modus operandi* of the *remedy* that seemed so plainly to arrest the rapid march in this case towards an apparently fatal issue. The facts, however, would seem to warrant the hope that future experience may prove chloroform to be a reliable agent to disarm this malady of its deadly power.—*N. O. Sur. & Med. Jour.*

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### Curability of Cancer, and its Diagnostic by Means of the Microscope.

At a meeting of the Academy of Medicine, held on the 26th September, M. Jobert presented a report on a case of sarcocele in a young infant, in which M. Pamard, of Avignon, operated, and *cured* the little patient. The alleged *cure* in this case gave rise to an interesting discussion, which is not yet concluded, on the curability of cancer, and its diagnosis by means of the microscope.

M. Robert doubted if encephaloid cancers were ever cured. The little patient had, doubtless, recovered from the disease, but it was not exempt from its recurrence.

M. Velpeau moved that the question of cancer should be brought before the academy at an early meeting. All surgeons were not of M. Robert's opinion as to the incurability of cancer. He expressed doubts as to the value of the microscope in the diagnosis of cancer, and undertook to prove its fallibility in the diagnosis and prognosis of cancerous tumours.

*October 3d.*—On the president announcing that this was the day appointed for the discussion of cancer, much amusement was created by M. Velpeau declining to speak before M. Robert, and M. Robert refusing to speak before M. Velpeau.

M. Leblanc opened the debate on the curability or incurability of cancer, by briefly going over the researches which he had made on the subject with M. Trousseau, and those he had lately made microscopically, conjointly with MM. Lebert and Follin. He considered the microscope of great service for the diagnosis of the cancers so common among animals. He did not believe in the incurability of cancer; and considered that an *early* operation diminished the chance of recurrence. His speech contained much valuable matter, but no new facts.

M. Barth followed, making, on this occasion, his *début* in the academy. His address was a very excellent one. As to *diagnosis*, he considered that, in a very great number of cases, this may be made with the naked eye, but that sometimes the characters were better seen by means of the microscope. In these first cases, the microscope afforded additional certainty of diagnosis. In a certain number of cases the physical characters are doubtful, and in these the microscope furnished an essential element of diagnosis; but it did not always remove doubts, and might sometimes even occasion mistakes. As to the *curability* of cancer, he thought that absolute incurability was disproved by facts, and unsupported by analogy. We should take into account all the characters of the tumor—those inherent in it and accessory to it—in order to determine the possibility of chances of recurrence.

M. Gerdy made some very interesting and novel observations on the anatomico-pathological characters of the sanguineous cancerous tumors. It was singular that, although these tumors were known in science, there was nothing said about them in books. How were they to be distinguished? Chiefly by their anatomical character. They were rich in blood vessels, and in *splenoid* tissue analogous to the placenta. Surgeons know that they recur after extirpation. Some of these tumors were situated in or near the bones, and were vascular and pulsatile, analogous to the spleen or placenta.

Breschet, Dupuytren, and Lallemand, called them simple tumours, although they have found colloid matter in them; but they are not such. He considered the microscope useful in many cases, but in others as likely to confuse.

*October 10th.*—M. Robert: I have said that the cure of cancer, especially of the encephaloid variety, is an exceedingly rare fact, if it can be well proved. It seems that M. Velpeau is not of this opinion. On consulting his work on diseases of the breast, I find that he has operated in 250 cases, in which the patients have survived the operation. He lost sight of 100 of these patients after one year, 150 after two years, and 200 after five years. It is matter of regret that, in these cases, the final result was not ascertained. Of the 50\* remaining, 20 have been free from the disease for five, ten, fifteen, twenty, and even twenty-five years; and these cases M. Velpeau regards as radical cures. This enormous proportion of cures seems astonishing, when we call to mind the results recorded by other eminent surgeons. Munro says that 4 out of 60 cases in which he operated for cancer were free from the disease for two years; but that three of them eventually had occult cancer of the mamma, and the fourth an ulcerated cancer of the lip. *Ergo, 60 operations and 60 relapses.* Mayo says that carcinoma of the mamma, even when operated on under the most favorable circumstances, and removed early, recurs in 95 cases out of every 100. Macfarlane operated in 32 cases of cancer, and collected the particulars of 86 other cases of his colleagues; and out of these 118 cases *there was not one in which the malady did not recur.* Boyer says that out of more than 100 cases in which he has known individuals operated upon for cancerous tumours of the breast, or of other parts, he has only known *four or five cases* which were thereby radically cured. M. Broca, in his prize work on cancer, says, that of 19 cases in which tumours were removed by Blandin, which were demonstrated microscopically to be cancerous, *not one* remained exempt from a recurrence of the disease for two years. Lebert says that, of 34 cases operated on for cancer, 6 died after the operation, 21 had a recurrence of the disease within a period varying from three months to two years, and the remaining 7 were lost sight of. I have said enough to show how unanimous are the opinions of the greatest authors as to the curability of cancer.

I cannot help thinking that the marvellous discrepancy in M. Velpeau's statistics has been due to errors of diagnosis, and to his having mistaken benign for malignant tumours.

\* [There is evidently some error in these figures.—ED. AM. JL.]

The surprising cases which he says remained cured for fifteen, twenty, or twenty-five years, must have been seen at a time when an error in diagnosis would have been quite excusable even in M. Velpeau. But M. Velpeau says he has never been deceived; and that in more than a hundred cases his diagnosis has been confirmed by the microscope. This, I would remark, *en passant*, is not very flattering testimony in favor of the microscope. Let me recall to your recollection the discussion that occurred in 1844, in the academy, on fibrous tumours of the mamma. On that occasion, M. Cruveilhier described very excellently the anatomical and clinical characters of those non-malignant tumours of the breast, which were often confounded with cancer, and showed how he had often dispensed with operations by recognizing their presence. His opinions, and above all, the name of "fibrous bodies," which he gave these tumours, were combatted by MM. Bérard, Blandin, Roux, Amussat, etc., who admitted the existence of such benign tumours, but held that it was impossible to distinguish them from cancer. M. Velpeau, on that occasion, defended the opinion of M. Cruveilhier. That he has studied these non-malignant mammary tumours, is evident from a paragraph in his article Mamelles, in the *Dict. de Med.*, in thirty vols. He affirms that diagnosis was possible.

But he had not *then* the experience which enabled him *now* to rectify error in the matter. Hear, therefore, how he then expressed himself before the academy: "M. Cruveilhier has gone too far in affirming that fibrous tumours of the breast may always be easily distinguished from those which are cancerous. In some cases this distinction is very difficult, and even impossible." And he further added: "The defiance which MM. Bérard, Blandin, and Roux have given M. Cruveilhier to recognize on the living woman a benign tumour, I would not be afraid to accept myself; and I do not hesitate to say, that if *I only committed four errors out of ten cases, I would feel quite satisfied.*" Gentlemen, may we not with justice conclude, after this avowal, that among M. Velpeau's cases of cancer, cured before the year 1844, there must have been several patients who were operated on for merely non-malignant tumors. And observe that, by a singular coincidence, the proportion of four errors of diagnosis out of ten is precisely that of the successful cases in his statistics, viz. 20 in 50.

Since the year 1844, the study of benign tumors of the breast has greatly advanced. Velpeau erred at first in calling them fibrinous; and it was only after the researches of Lebert

that he gave them the name they still retain, *adenoid* tumors. These researches have greatly elucidated the pathology of tumors, and thus advanced clinical medicine; while the microscope, in revealing their minute structure, has made us acquainted with physical characters never before observed. I cannot admit the infallibility which M. Velpeau claims for himself, for I believe that cases are still met with which may deceive the most able practitioner. It must, therefore, be believed that M. Velpeau's results are not rigorously exact, or capable of proving that the cure of cancer is less rare than is supposed.

Hitherto, we have only been discussing the two kinds of mammary tumors which are liable to be confounded with each other; but if we turn our attention to the tumors of other organs, we will find the causes of the errors of diagnosis to be more numerous, and hence we can understand thereby the diversity of opinion which exists among surgeons as to the curability of cancer. In these organs, besides cancer and hypertrophic tumors analogous to those of the breast, we find, also, epithelial and fibro-plastic growths. The latter, however, present some affinity to true cancer, and their external characters do not permit of their always being clinically recognized; consequently, they may grow again after the operation. Now, persevering microscopical researches, made by eminently qualified and conscientious men, have demonstrated, on the one hand, that the minute structure of such tumors differs essentially from that of cancer, and that often the naked eye may distinguish them from it by incontestable characters. Clinical observation, on the other hand, has shown that, if these growths reappear after extirpation, they do so less frequently than cancer; that the relapses are generally local, and admit of fresh operations being performed with a better chance of definite success; and, finally, that their becoming generalized, or causing death, only occurs in rare cases, and is exceptional.

If we would put an end to the confusion which exists at present on all that relates to cancer, and above all to its curability, we would sedulously exclude from the question all those epithelial and fibro-plastic growths which have only special analogies to it, but which differ essentially from it in their intimate structure and evolution.

M. VELPEAU: M. Robert, in his speech, has only discussed one side of the question, viz: the curability of cancer; and he has said nothing of the value of its microscopic characters, although he appears to be a partisan of the microscope. He complains that I have not given the definite results in a large

number of my cases of operations. Among the 200 patients whom I unavoidably lost sight of, relapses occurred in a certain number of cases, but in the rest I never could ascertain the results. Out of the 50, whom I carefully watched, there are 20, all of whom I could find to-day, perfectly cured. M. Robert explains this considerable proportion of cures by premising errors of diagnosis. I do not pretend to be more infallible than him; I have sometimes been deceived; but there *are* cases in which one *cannot* be deceived. I have taken great care to call *cancer* only those cases which presented all the characters with which it was impossible to be deceived at the bedside. In these cases, the microscope has never shown my diagnosis to be fallacious; and the same has occurred in every case in which I diagnosed an adenoid tumour. Far from undervaluing microscopical researches, I have always encouraged them, for I wish much to see science possessed of more certain marks than at present. But in granting a high place to the microscope for diagnosis, clinical observation must not be excluded. When M. Robert meets an ulcerated, fungous, softened tumour, he cannot be deceived; nor can he, if he meets one which is hard, knobby, and uneven. For my own part, I confess that in such cases I would not be deceived; and that the microscope has always confirmed my opinion, I would appeal to M. Lebert, who has for a long while attended my visits at *La Charité*.

M. Robert, in recalling the former academy discussion of 1844, wishes to make me contradict myself, in making me say that I had then confessed having been deceived. I still frankly admit that there are cases in which I may be deceived. When I say that I have always diagnosed the tumour, I mean in the cases in which they presented their habitual characters.

I repeat, I have been far from discouraging microscopic researches. For thirty years I have studied the subject of cancer with lively interest, and a sincere desire to arrive at the truth. In 1836, I stimulated M. Donné to make researches in this direction, and later still, I advised M. Lebert to follow out the inquiry. I said to them: "Search; for cancer ought to have a special character." I was especially anxious that something might be found in the blood of the cancerous; for if the characters of cancer could be found therein, nothing would be easier than, by examining a few drops of blood, to diagnose the disease. Microscopists found nothing peculiar in the blood; but at last they discovered a something, and, overjoyed at this, I was one of the first to applaud the achievement. But is that something sufficient? I believe not; and

it is because I consider the microscopical characteristics insufficient that I have studied with the greatest care the clinical indications.

I tried, at first, to isolate benign from malignant tumours, and I commenced to separate from true cancer those tumours usually confounded with it. I have now come to the conclusion that, in true encephaloid cancer, the variety which is most prone to return, a cure *may* sometimes take place. In support of this proposition I shall cite some facts, and the academy will judge whether they are good, or whether they deserve the severe judgment pronounced upon them by M. Robert.

In February 1836, a woman consulted me, who had on her breast a large tumour, the size of both fists, which was ulcerated and fungous, discharging an insupportably fetid ichor, and which crumbled under the finger. There could be no more characteristic specimen of encephaloid cancer, and although all the microscopes in the world had been testifying against me, I should still have held this opinion. Well, I operated on this woman. This was nearly twenty years ago; and I saw the patient recently; she was perfectly cured, and had had no relapse.

Another lady had a tumour very similar to that which I have described, which was removed; the wound cicatrized perfectly; but, eighteen months afterwards, a tumour very like the original one manifested itself in the axilla. This second tumour was removed in 1841, and since then she has enjoyed perfect health, and has had no relapse. I may state that M. Jobert was the surgeon who operated the second time. (Here M. Jobert made an affirmative sign.) Are there not other tumours, besides cancerous, which reappear thus, not at the original point, but at a distance? We cannot tell.

I know that to these facts an objection may be raised. It may be said: "How do you know that the recurrence, which has not happened at the end of two, three, five, or ten years, may not take place in twenty, twenty-five, or thirty years?" and in this manner it may be said, if no return of the disease has occurred, that the patient has died before there was time for its manifestation.

It may be objected that, in the cases I have just reported, the microscope was not used; but since 1847, when the use of the instrument became general, every tumor that I have extirpated has been examined by means of it. To those who could say, with great justice, that I am not sufficiently qualified for microscopical researches, I would observe that the cancerous growths were examined for me by the learned young

microscopists who attended my visits, by M. Follin, M. Robin, M. Broca, and M. Lebert himself. Now, since this time (1847) all the cases in which I extirpated malignant growths, and in which no recurrence took place, were previously demonstrated by the microscope to be true cancerous tumors. It may be remarked, however, that sufficient time has not yet elapsed to enable us to say with certainty that these patients are exempt from any chance of a relapse. But we know that when recurrence of the disease happens, it is generally within two years after the operation, and that after this period the chance of this becomes much lessened. Now, these patients have been free from disease for *seven* years. I think, therefore, that it is proven that cures have happened in cases where the existence of cancer had been microscopically examined. I maintain that errors of diagnosis were impossible in the cases I have cited.

M. Robert thinks that I confound different things together ; as, for example, epithelial and fibro-plastic tumors. This objection brings me back to the microscope, on the use of which I wish to make a few remarks.

Laënnec divided tumors into two classes, which are merely those called, now-a-days, homeomorphous and heteromorphous growths. Among the *heteromorphous* tumors we class encephaloma, schirrus, phagedenic ulcers, etc. Among the *homeomorphous* we rank fibrous and fibroid tumors, cutaneous excrescences, condylomata, corns, fungosities, etc. Can it be said that there is the least analogy between a malignant fatal tumor and a corn on the foot ? The microscope reveals the same minute structure in a venereal vegetation and in an excrescence (*verruë*.) Are they, then, the same thing ? M. Lebert having remarked that the tumors in question contain only epithelial matter, concludes that they are not cancer. He must have seen many cases, however, since the publication of his *Traité de Physiologie Pathologique*, to convince him that it is very difficult to reconcile clinical facts with the results of microscopical observations.

He says that the composition of these tumors explains their nonrecurrence ; but this is erroneous, for epithelial tumors return like others. Nay, more, I declare that they return *oftener* than other tumors. However, M. Lebert said to me : "You do not distinguish, but confound together tumors which are different ; those observations only are valuable which are confirmed by the microscope, and all preceding ones are worthless." I cannot entertain this objection. However, I commenced investigating anew ; I submitted cancers of the lips to M. Lebert ; he found them epithelial, and consequently pro-

nounced them to be nonmalignant ulcers. Yet, in the most of these cases, the disease returned after the operation. In the majority of cases, ulcers of the lips are epithelial tumors, and they return like cancers. M. Lebert has been obliged to acknowledge this; but he says that, unlike cancer, they grow on the same place, and produce no general infection. I would answer, that cancer also sometimes returns on the same place; and I would ask if it is true that epithelial growths only return on the same site? I am inclined to dispute it; and Lebert and his disciples have attempted to get out of the difficulty by saying that, when epithelial cancer does not return at the same place, it recurs in the neighboring lymphatics (*ganglions*;) that is, in tissues directly continuous with those in which the malady primarily appeared. But does not this also happen in cancer?

Homœomorphous tumors, therefore, are exactly like cancer, for they recur both at the same place, and at a distance from it. The micrographers say that they never occur except in the neighborhood, or in the lymphatics. I need not, in answer, adduce old cases of recurrence in the viscera, for in these the growths were not microscopically examined; but I may point to recent cases in which homœomorphous tumors recurred in different tissues from those primarily affected—as in the bones.

The treatment of the two classes of tumours is the same; we do not apply caustic, the cautery, or the knife, any less to epithelial than to cancerous growths. Wherein, then, do they differ clinically? It may be said that epithelial tumors do not cause death so speedily as cancerous, the latter often recurring in the viscera. But if both are fatal, what matters it where the recurrence happens? To recapitulate: epithelial tumors recur after extirpation, not only on the original site, but, like cancer, at a distance from it; they return alike in homologous and heterologous tissues, in the bones, and in the viscera. Call them epithelial cancers, if you will, to distinguish them from cancer, properly so called, and from scirrhus or encephaloma, but they will always be regarded as cancerous by me.

The so-called fibro-plastic tumors are said to be another variety of homœomorphous growths; but I cannot accept this distinction as a decided fact. It is said that they are simple hypertrophies of a normal tissue, or a production of a tissue analogous to normal tissues. They are evidently another thing. How can we compare, for instance, the enormous fibrous tumors sometimes found on the shoulder; and yet the microscope reveals the same texture in both. Keloid is also

fibro-plastic tissue; but it does not resemble the growths of which I have spoken, and yet they are not distinguishable by the microscope. I have seen enchondroma return; I remember removing a tumor of this kind from the foot, which reappeared, after some years, on the thigh. You say, perhaps it was cancer; we need more of such cases. There have been more similar to this, and confirmatory of it. I will quote one: A man presented himself at *La Charité*, having a tumor which had grown on the site of a similar one removed by M. Malgaigne; and some years before that, a tumor of the same kind had been excised by M. Blandin, so that this was the third relapse. The new tumor had burrowed under the cicatrix of the last operation. In spite of the small chance afforded by another operation, I yielded to the earnest solicitations of the patient, and removed the growth, cutting round it very deeply, so as to make sure of leaving none of it in the wound. All went well, the patient seemed convalescent, when I observed, before the cicatrix had formed completely, a nodule commencing below it. We allowed the wound to cicatrize, and I sent him away without saying anything, firmly resolved to make no fresh attempt. Some time after, the tumor was again developed, and the patient, knowing my determination, went to the *Hôtel-Dieu*, to be under the care of M. Roux. Amputation of the thigh was performed, and he left the hospital. He entered the *medical* wards of the *Hôtel-Dieu* some time afterwards, complaining of something in the chest. All at once a fresh growth had occurred on the leg, and simultaneously tumors of the same nature had developed themselves in the thoracic viscera. The patient died, and his body was examined by MM. Follin, Giraudet, and Verneuil, who found in those tumors nothing but purely fibro-plastic tissue.

I could cite many similar cases; but one or two must suffice. A most beautiful young woman had an enchondromatous tumor on her arm, which had increased to such an extent that her only chance of cure lay in disarticulation of the arm. The patient declined the operation, but remained in the hospital. The tumor grew as large as the head, and she died, and at the autopsy similar tumors were found in the lungs. M. Richard, a great partisan of the microscope, examined these growths, and found them to be composed of only fibro-plastic tissues. I remember another case of enchondroma of the foot, which returned after removal; I amputated the leg, and it recurred on the thigh; amputation of the thigh was performed, but the tumors became developed in the lungs.

M. Lebert is aware of these facts, and he admits the recur-

rence of homœomorphous tumors on the original place, and even at a distance in the neighboring lymphatics. But that is not enough; he could not deny the existence of cancerous cachexia in an individual having canceroid who had become emaciated, and had a sallow icteric tinge. *There are several species of cancer—cancers with and without cells.*

As regards the cancer cell, what have we to prove that it is the pathognomonic character of cancer; that it is not, for example, a transitory condition as yet but imperfectly understood? At present, there are two classes of microscopists, viz. the clinical and the scientific; the latter variety, who are principally in Germany and in England, naturally attach an absolute value to microscopical characters. The clinical micrographers are less absolute, and I have more confidence in them. Their assertions, however, must be taken with some reserve. For example, Lebert says: "There is nothing pathognomonic of cancer, except the cell." Now the cell is not pathognomonic, for we now know that it is the nucleus which is most important. But I am not more predisposed in favour of the nucleus than the cell. Very likely the nucleolus may, next year, be regarded as the all-important element. I sincerely trust that microscopists may arrive at something definite. If I have been somewhat severe upon them, it is because I think they have been too rash, and because I dreaded their going astray. They have affirmed that the cell is pathognomonic of cancer, and when experience demonstrated that their proposition was not always true, they actually tried to explain these pretended anomalies by an alteration of the cell, capable of making it momentarily disappear. If the cell is not *constantly* found in cancer, it cannot be said to be a pathognomonic mark of it.

The truth is, whatever be the explanation of it, *the cell does not always exist in true, well-developed cancer*, (I speak of encephaloid); *and it is sometimes found in tumors which are evidently not cancerous*. I could quote many illustrative cases, and especially that of a woman with a non-malignant tumor in which the cells were found, who never had cancer, and who was not the least likely to have it. Many years ago, I removed a sanguineous cyst from the lip of a young girl, in the matter contained in which, M. Lebert found cancer cells. The girl recovered perfectly; she has since been married and had several children, and is now in the best health. I removed a non-malignant tumor of the calcaneum, in which the microscopists found cancer-cells. The following seems to me very conclusive: A woman, about forty, had, on the right breast, an encephaloid lardaceous tumor, of that worst kind

which returns so soon, and always fatally. As the woman was young and fresh-looking, I removed the growth. The tumor was lardaceous scirrhus, through which were scattered, here and there, portions of cerebri-form tissue, not yet softened. I cut this tumor into five pieces, one of which I sent to each of five microscopists, asking their opinion of it. *None of them could find a cancer-cell in it.* The poor woman appeared at first to convalesce, and to confirm the diagnosis of the micrographers. But, after a few months, a small tumor appeared near the cicatrix, which was soon followed by general infection, and she died ten months after the operation. A few years ago, I performed amputation of the thigh, on a lady, for a tumor containing cancer-cells, and she is now in perfect health. Fifteen years ago I performed amputation for a disease of the external condyle of the tibia, containing cancer-cells, and the patient is still alive and well.

I may remark that cancers containing *no* cells have occasioned the recurrence of cancers containing cells. We must, therefore, admit one of two things—either that the recurrence was not of the same nature as the primitive malady, or that the first tumor was the same as the second, but containing no cells. I recollect a case where a tumor of the jaw recurred. There were cells in the second tumor, but none in the first. Must we, therefore, conclude that the first tumor was epithelial and the second cancerous? Assuredly not. The nature of a tumor cannot be judged of merely by the presence or absence of cancer-cells.

All these facts constrain me to declare that the microscope has not as yet aided much our diagnosis of cancer, and the question of its curability or incurability. I believe that there is in cancer some unknown and peculiar element which has hitherto escaped our observation. Else why should not the microscope be able to distinguish those fibrous tissues which recur from those which do not? or why should it not explain these recurrences? But, on the other hand, I am convinced that, in doubtful cases, the microscope may do us great service by confirming our diagnosis. The microscope is an additional eye which we possess; but we should never forget that this eye cannot enable us to see that which does not exist. It is difficult to avail ourselves of the instrument, and this is demonstrated by the frequency with which we see the most expert microscopists at variance among themselves.

This is only a part of what I would say on the subject. The continuation of the discussion may probably furnish me with an opportunity for still further giving expression to my sentiments.—*Monthly Jour. Med. Science*, Nov. 1854.

## Hare-Lip---The New Operation.

BY W. S. WESTMORELAND, M. D.

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The operation for hare-lip, within the past few years, has undergone various modifications, the object of each being to obviate the deformity (a notch or depression in the lip,) which is constantly observed after the operation, by the ancient method. Several of these modifications have been received by the profession, and for a time have enjoyed great favor; but no one of them, I believe, has stood the test of experience, all being alike subject to frequent failures. Nor do I think it could be otherwise, when each has been applied indiscriminately—without any attention, whatever, to the deformity, or peculiarity of the case to be operated upon. Were we to study more carefully the peculiarities of each case, putting aside our predilections for certain operations, and selecting such modifications as would best fill the indications of each case under consideration, we would certainly have better success; and consequently less to condemn in the approved methods of the present day. This would certainly be a fruitful subject for discussion, and at some future day, when time will permit, may occupy me—my object now being merely to place before the profession the claims of the operation of M. Nelaton, with the result of a case upon which I operated a few weeks ago.

The object of the operation of M. Nelaton is to obviate the deformity above alluded to, by filling up the space where the notch would present itself, by means of the flaps, or rather one continuous flap made by the incision paring the edges of the fissure. The idea was not original with M. Nelaton, but is due, I believe, to M. Malgaigne, or, as some contend, to Clémot of Rochfort—Nelaton's method being a modification of the operation of the above mentioned surgeons. M. Malgaigne's proposition was, to fill up the deficiency by two flaps, made by two incisions commencing at the top of the fissure, and terminating about three lines above the natural border of the lip; he then reversed the flaps, the raw surface of one coming in contact with the corresponding surface of the other—thus making a projection below the natural border of the lip—all being secured by means of pins, &c., as in the common method. M. Nelaton, instead of the two incisions, as practiced by M. Malgaigne, proposes to make one continuous incision, commencing about three lines above the natural border of the lip

on one side of the fissure, making the whole circuit of the fissure, and terminating at the same distance above the surface of the lip on the opposite side.

When the operation is completed, there appears to be a great redundancy of tissue, the flap making a considerable projection; but in a very few days it becomes hardened, or atrophied, and in some cases it is barely sufficient to obviate the deformity for which it was intended. But, should there be a slight projection, after adhesion is complete, something which M. Nelaton contends, seldom, if ever, occurs, it would only be necessary to clip it off with a pair of scissors to make all smooth and neat.

The operation above alluded to, the result of which I propose giving here, was performed four or five weeks ago upon the child of Mr. S. B., of this county. The child was two months old—the hare-lip single, being just the deformity to which the method of M. Nelaton is applicable. I adopted his method, and performed the operation as above described, with, perhaps, some unimportant exceptions. After approximating the edges of the fissure by means of two pins, I found it necessary to make a stitch through the base of the flap, in order to adjust all accurately. Although at the close of the operation the projection made by the flap was considerable, yet in less than 24 hours it had greatly diminished—extending but little below the natural surface of the lip. All did well till towards the close of the second day, when from some cause, unknown to me, the top pin gave way, and a short time after the bottom one; so that upon my arrival, an hour or two after, I found both pins detached, and the fissure opened as far as the flap would permit, it acting as a means of connection between the border of each half of the lip, and thus preventing any great separation. I brought the edges of the fissure together by means of adhesive strips, and it very readily united by granulation or the second intention, and is now a very respectable lip. The only deformity left is the width of the cicatrix; and had it been possible for me to have watched the case more closely, and kept the strips more accurately applied, the lip would have united without any difficulty whatever.

This method, aside from obviating the notch, or depression, for which it was first proposed, has certainly other advantages, as the result of the above operation most conclusively proves. Certainty of success, even after all hope of a union by the first intention, is an advantage which should not be overlooked in selecting an operation for the relief of this unsightly deformity.

It will be observed that this modification is not applicable in all cases; nor is there any method, however perfect, which

can be applied with the same prospect of success in every variety of the deformity. In some cases the fissure extends so far into the nostril that it is impossible to make an incision around it, that would insure a flap of sufficient dimensions. Again, in some cases the fissure extends to the superior maxillary bone, soft palate, &c., rendering it entirely impossible to make a continuous flap. On a case of the latter variety, I operated a few days ago, the deformity being so great that I was forced to reject all the recent modifications. The deformity in the superior maxillary bone, in this case, was as great, or greater, than I recollect ever to have seen in single hare-lip. The operation failed, and, I think, for the want of support to the lip, pins, &c., the edges of the fissure being brought together over this immense chasm in the bone. For the relief of this case, I feel that there must be some support given to the edges of the fissure while adhesion is going on; and to do this, I propose a silver plate fitted in the chasm by means of grooves at each end, the grooves fitted or resting on the projection of each half of the divided bone, thus making a continuous surface.—*Nashville Journal of Medicine and Surgery.*

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### **The Latest News from the Army in the Crimea.**

The following extracts, from a letter written by a surgeon of the guards, dated Camp before Sebastopol, November 12, will be read with interest:

“The day before the battle (of the 5th Nov.) was a most miserable specimen of the Crimean winter—cold, damp and rainy; a thick fog prevailing, and obstructing the view of the surrounding hills. I had, luckily, on that morning sent away to Scutari several sick men, upon whom it was evident no treatment in our situation could be of any avail. This is what we continually have an opportunity of doing as ships arrive, and it is a great boon to the patient, as well as being advantageous in results to the medical officer, who in these times must have great responsibility on his mind.

“At six o'clock, on the morning of the 5th, I was outside my tent, about to visit the sick, who at that time numbered thirty-nine. The fog was so dense and heavy that I could scarcely discern any object fifty yards in front of me. There was some little firing of musketry towards the hill overlooking the encampment of the 2d division, but not very rapid; and, as it is no unusual occurrence for the outposts to ex-

change a few shots, I did not think much of it, but paid the usual morning visits, and signed the reports. At this time, however, it was quite evident that something more than ordinary was about to occur. I took a bit of biscuit, and immediately mounted my horse, and, giving directions that the usual preparations might be made for the reception of the wounded, rode off to the battalion, which was encamped about 500 yards distant, and where my assistant had pitched his tent. The firing was now most severe, and the shells were bursting ahead of us in every direction about 250 yards in advance. I came upon some of the tents of the 2d division, and here I first saw some wounded men of that division being carried to the rear, and could see in front of me still some guardsmen carried on stretchers, to whom I at once advanced. We were now in the midst of the encampment, and I had directed that two of our poor wounded soldiers should be laid down under cover of one of the large hospital marquees until one of the ambulance wagons of our division, which I saw advancing, should arrive. Here, also, was Dr. Robinson, of the fusileer guards, attending to the more pressing wants of some men of his regiment. The ambulance wagon arrived, and we had filled it with the wounded of the brigade. My assistant, Dr. Ricketts, was in front, superintending the transport of some more wounded men to my position. The whiz of the shot and explosion of shell were at this moment incessant. While in the act of turning round to remount my horse, a shot passed through the leg of my trousers, and when in the act of remounting, a round shot came through the tent, and at the same instant my poor horse fell, having been shot through the head, his brains sprinkling my face. This, however, was not all. One of our poor soldiers had just shown me his hand, which was smashed, and, having directed him to make the best of his way to my field hospital, he was in the act of picking up his piece to do so, when, at the same time that my horse fell, I heard him cry out and saw him fall by my side, shot through the body. I hear, also, that several sick men were killed by the explosion of shells, while lying in the hospital tents. I now walked back to see how many wounded had arrived at the field hospital; but, as no very serious cases had yet appeared, I went across to our general's tent, who had been wounded in the arm. A servant then came, desiring that I would go to Lord Charles Fitzroy, whom I found badly wounded through the neck; but, on my way thither, I met poor Captain Ramsden, being carried on a stretcher; he was evidently dangerously wounded, and I had both of them taken to my tent, that I might be able to visit

them occasionally with greater facility during the day. Poor Ramsden only lived for an hour; he was mortally wounded through the chest; but, independently of his death-wound, he had received no less than six bayonet wounds in different parts of the body, while lying helplessly wounded on the ground, and imploring the advancing enemy to leave him. Never shall I forget his countenance as he grasped my hand, and pointing to his wounds, told me at intervals of the barbarous and cruel treatment he had received. The wounded were now fast arriving, and, having abundance of assistance from medical officers of other regiments, who had kindly volunteered their services, we commenced their treatment.

"The wonderful patience and endurance of suffering I witnessed on this occasion were beyond anything I could have conceived possible; and surely the heartfelt thanks of the poor soldier, confident of a benefit conferred upon him, must be a very grateful reward for the attempt to perform one's duty conscientiously. Our wounded were all transported to Balaklava, for conveyance to Scutari, as soon as possible, and when I tell you the number of wounded in this battalion alone, it will appear incredible how much could be done in so short a time.

"I enclose you my return of casualties in action:

4 officers killed.	4 dangerously wounded ;	5 severely wounded—total,	-	-	-	-	9
5 non-com. officers killed.	5 severely wounded ;	6 slightly wounded—total,	-	-	-	-	11
57 privates killed.	23 dangerously wounded ;	29 severely wounded ;	55 slightly wounded—total,	-	-	-	107

"You will be interested, also, to know that eighteen operations were performed in my field-hospital, of which number one only was unsuccessful; but this, I deeply regret to add, was upon the person of a brother officer. There was abundance of assistance at hand; and, after superintending the transport of all my wounded by the ambulance wagons, I was glad of a slight respite, after more than forty-eight hours anxious work. The next day I accompanied two wounded officers to the harbor, for conveyance to Scutari, and on my return reverted to the usual routine duty, as if no stirring events had happened. One curious and remarkable result of this last action was, the very few balls I had to extract; owing to the close proximity of the combatants, they generally penetrated both sides of the limb or body, which was very different at Alma."—*Medical Times and Gazette*, Dec. 9, 1854.

## Observations upon Diseases of the Uterus.

BY THOMAS E. MASSEY, M. D., OF MOBILE.

The character and extent of the influence exerted by the observations and conclusions of physicians of established reputation, are not easily defined or estimated. Their published views in reference to subjects in course of investigation, form stand points, from which the reflections and enquiries of numberless minds take their departure; and according as their foundations are reliable and secure, are their tendencies happy or deplorable, to the profession and humanity. Hence, while the increase of a physician's reputation augments his obligations to exercise caution and deliberation in the enunciation of his opinions, it becomes the more important that their merits be faithfully examined.

Such thoughts have been suggested after the perusal of a communication under the above title, in the November number of the New Orleans "Medical News and Hospital Gazette," by Dr. Warren Stone. Should an apology be deemed appropriate for the notice it is proposed to take of this communication, and especially as it may be judged to be rather elaborate in reference to an essay of hasty and unstudied composition, its authoritative constructions and the spirit of our introductory remarks, are offered.

The design of Dr. Stone's article is, doubtless, a laudable one—a caution or protest against the misuse or abuse of perhaps the most valuable contribution to modern pathology and therapeutics. Any degree of failure in the execution of such a purpose is a fair subject of regret. It is a theme worthy of laborious and powerful effort, but which demands a mastery of all the knowledge and observation of others, tempered by a faithful personal experience. A careful scrutiny of the elements of abuse or misconception, and a discreet exposition of their capacity for good or evil, are at variance with superficial generalizations and unsoundly declared conclusions.

The second paragraph of Dr. Stone's communication begins thus: "The conclusion I came to long ago, was, that either this organ (uterus) is not governed by the same physiological and pathological laws as the other organs of the human system, or the writers on the subject have been blinded by their zeal and carried away by theory. And further observations incline me to the opinion, that men have been mistaken! \*  
\* \* \* Such minds can scarcely be content with plain matter of fact pursuits, but rather fix upon something that

admits of speculation, and something more wonderful than reality."

To assert an entirely satisfactory comprehension of our author's position here, would hardly be safe, scarcely plausible. The attempt must be made, however, to state the impression conveyed—all responsibility as to its identity with the author's intentions, being expressly disavowed. Dr. Stone *concluded*, "long ago," either that the uterus *was not* just like every other organ, as he had always supposed; or, that *it was*, and "writers had been carried away by theory" in giving it any particular attention. And, after having so *concluded*, "further observations incline him to the opinion" that he was right! This, then, must be understood to be a polite form of avowal of the opinion that the uterus *has* the same physiological and pathological laws as every other organ in the economy! And the natural inference must be, that Dr. Stone is "inclined to the opinion," that the expositions of Dr. Bennet, and other late uterine pathologists, are all balderdash! But, upon reading seven or eight pages further, suspicions arise as to the legitimacy of this inference; for the essayist gets to dipping incontinently and quite extensively into granulations, engorgements, nitrate of silver, and all that sort of thing!—in the manner, it is true, of one who deems them of slight importance, but had always been familiar with them—who is of little faith, but had been at considerable trouble to draw pathological distinctions, and select remedial applications, in addition to those of the delvers "after things more wonderful than the reality!"

But, passing from these recondite developments, it is worthy of remark, that modern uterine pathology introduces us to its study, where we have long been taught to begin that of other organs—inflammation. This inflammation it exposes to our *sense* of sight and touch. This scarcely evinces a less "matter of fact pursuit," or partakes more of "speculation," than the older pathology, in its flounderings among but signs of disease! A rehearsal of the remedies for functional derangements of the generative apparatus, which were treated as the essence of morbid action, is unnecessary for the illustration of the relative preponderance of conjecture. The pages of any treatise on the "diseases of women," written previous to the last ten years, will be satisfactory on this point. Recent writers may have been, to some extent, "carried away by their zeal;" but, with less hesitation may it be asserted, that recent *practitioners* have, with avidity, caught at what they trusted was an easy solution of a multitude of difficulties. Each class will right itself after a while. Men are prone to

extremes ; and progress in medicine, as well as in other things, wonderfully attests the value of this trait of human nature. One extreme begets its opposite, and, in the attrition, truth is sometimes eliminated. Uterine pathology will probably lose nothing by expressions of adverse opinions.

In reference to the question of the government of the uterus "by the same physiological and pathological laws as the other organs" of our bodies, the profession is judged to be pretty unanimously arrayed in the negative. Our information induces the faith, that the elements of our organization assume different and specific combinations in the structure of our various organs, that each may be adapted to the functions assigned it. The functions of organs being distinctive, and their anatomy of course necessarily so, the creed of specific modifications of pathological laws is easy and natural. Simple inflammation produces different symptoms, pursues a different course, and demands modifications of management, according to the tissue implicated ; and, further, its laws and treatment vary according to the uses of the organs invaded. Will the modified character of inflammation, which we must study, for success in treatment, as it appears and is treated in the eye, the lungs, the liver, and the skin, suggest itself to our readers ? The uterus is more distinctly appropriated and confined, in our apprehension, to one specific end than perhaps any other organ of the human body, and characterized by greater complexity in its adaptation. Instead of enumerating here its peculiarities of structure, position, and functions, let them for a moment be recalled, and wonder will cease that its pathological state should assume expressions requiring special study.

But a word more. Not only has the uterus a physiology and pathology of its own, but he must have but limited experience who is not often struck by grave differences in the uterine structure and laws of individuals, necessitating, in disease, as many and important modifications of treatment as individual cases of any disorder known to the human economy. It may, perhaps, more truly be said of the uterus than of any other organ that, in disease, it requires comparison with itself, and not with another uterus ; and the diversity of symptoms are only to be explained by the habits of health. Identical uterine symptoms seldom proceed from identical lesions. An amount of disease originating intense suffering in one woman, in another may produce no consciousness of its existence. The very shape, size, and relative proportions of the uterus vary in different subjects, and all degrees of skill and experience cannot equally discriminate a healthy from a

diseased uterus. The uterine neck varies, in health, in length, breadth, shape, position and consistence, and, oftentimes, in the same person at different examinations; and what is a diseased *function* of one, is normal and constant in another. A profuse menstruation to one, is natural to another. Menstruation is limited to two or three days, with some women; that of others extend to six or eight days—the quantity discharged being as disproportioned as the duration. Many women have borne large families without having ever menstruated. That sensibility of the uterine cervix varies, independently of amount or character of disease, is evident from the different effects of the simple touch, or contact of remedial agents. From these and many other considerations, the writer's faith is strong, that the uterus is not exactly like any other organ!

Dr. Stone says: "The diseases of the uterus, to my view and experience, are *simple*; and, if the natural efforts are encouraged, are strongly disposed to recover!" Here, quite an extensive train of interrogations and reflections suggest themselves. *Are the diseases of the uterus simple?* If so, in what consists their simplicity? Their well defined and constant symptoms—their limited number—their invariable, identical relationship to specific, appreciable lesion, and exactly defined amenability to simple treatment? Are they simple in their origin, progress, in their relations, complications and consequences? Or does their simplicity consist in diagnosis and prognosis—in the facility, speed and certainty of cure? Are they disposed, of themselves, to resume a healthy condition? And, if so disposed—not in complete independence, but only by our encouraging natural efforts—is the manner in which we should tender our assistance well defined, simple, and readily applied? All these little preliminaries, and several others, must be adjusted, before the probable attainment of any very general assent to the doctrine of simplicity of uterine diseases. In truth, they exact but little familiarity with their manifestations to convince, that precisely similar symptoms may be present both with and without appreciable physical alterations; that identical local affections seldom produce identical symptoms; that what is either a functional or organic derangement in one instance, is a perfectly normal condition in another; that appreciable morbid alterations of the uterus, and its cervix, are sometimes amenable to constitutional treatment—and at times to that mode alone, while in other cases they are totally rebellious to all save topical medication; and that remedies, for local application, must be greatly varied and judiciously chosen for various lesions and their stages, and for the general condition of the patient. These items are not

very promising advocates of the doctrine of simplicity! Interrogating the most simple form of uterine disorder concerning which we are consulted—a morbid cervix uteri, accused of all the ills complained of—departure of all ailings, consequent upon restoration of the cervix to health, by means of the most simple local treatment—and we are presented with a case, than which the afflictions of humanity offer none more disagreeable to the practitioner; none more of a tax upon his energy, industry and patience! And when, to all these suggestions, is added one alluded to by Dr. Stone—that some sagacity or experience is requisite, to discriminate, habitually, a healthy from a diseased uterus—and that a fold of the vagina occasionally suffers—our admiration of the simplicity of uterine diseases is ineffable!

Are diseases of the uterus disposed, of themselves, to recover? It is a very interesting faith with many, that the evidences of disease are but indications of nature's efforts towards a cure, which she often makes desperate attempts to accomplish, and requires not the interference, but only the assistance of our art. With no wish to disturb this pretty conceit, doubts obtrude themselves as to such happy ascriptions to uterine lesions. It is very true, that the majority of females have, during the active part of uterine life, some more or less prolonged and severe derangements of that system; but how is it given us to decide either as to the final or approximate cause of such troubles? On the other hand, the cases of uterine disease presented for special treatment have been of previous considerable duration, from one to twenty years; and every kind of available testimony generally establishes, a progressive increase in extent, complexity, and severity, instead of improvement! True, this is admitted to be frail evidence of benignant nature's first intention! and it is a matter for regret that more or other testimony is not attainable, especially in the direction of the faith of Dr. Stone; for, as nature mostly does her work very well, and as our best assistance is generally most wisely tendered by letting her alone, we should have but little distress in controlling uterine diseases! Nature has most excellent laws, doubtless, and they may be most carefully indexed; yet, the distinctions between her own salutary efforts, and indications of the destructive processes, might be more distinctly disclosed to the cultivators of our art without disadvantage.

In the course of the article under review, it is asserted, that "in the examination to ascertain the state of the parts, the sense of touch is far better than the sense of sight." This is unquestionable; the touch is more extensively available than the

sight ; but no necessity exists for imposing all the responsibility upon one sense, when a second can also be pressed into service. The one is often desirable for the correction of the errors of the other ; and sight is essential to local medication. The speculum is valuable in diagnosis—indispensable in treatment ; but for the welfare of some unfortunate patients, had better never been invented. Some, doubtless, “to appear wise and scientific,” (for different people have different ways of creating impressions,) “make a display with the peculum ;” but these are equally “charlatans” in most other respects, and as such are generally so well known and “abominated” by the rest of the profession, that they are illegitimate subjects of argument.

After long experience, Dr. Stone “became satisfied, that where there is no general disturbance of the system, all symptoms of disease of the uterus are confined to the organ itself.” This may be true in a very limited sense ; and regret is experienced that more precision of expression is not employed. If there is no “disturbance of system,” preceding and causing, accompanying or consequent upon, the uterine disorder, it is, at least, *probable* that all the symptoms *are* confined to the organ itself !” But, if pre-existing ill health shall have produced uterine disorder, the reaction from the latter will exasperate the former ; there will be new symptoms, indicating the new source of irritation. Again, some functional derangements originate in organic change. What brought this last about, it boots it nothing here to enquire. These derangements have, time out of mind, been known to produce various deprivations of general health ; and are now known to be remediable by treatment directed to the cervix uteri. Chlorosis and amenorrhœa have been associated in the medical mind for some years ! Dysmenorrhœa and menorrhagia, (signs mostly of local disease,) are suspected of producing symptoms not “confined to the organ itself !” Leucorrhœa, (in the misapprehension of an effect for a cause,) has been accused of some quite grave, distant “disturbances !”—while hysteria and neuralgia, of as violent and extensive character as ever witnessed, have retired before skillfully conducted assaults upon the os uteri ! Judging by the mode of avowal of a want of confidence in *uterine sympathy* with distant organs, the suspicion is aroused that, perhaps, no friendship is entertained for the *word*. The remark occurs, that “the occasional nausea and irritation of the stomach, in connection with disturbance of the uterus, proves nothing, except that constant and persistent irritation in any part of the system may disorder the functions of the stomach.” Precisely ! An injured *toe* may occasion vomit-

ing. But, probably the toe is not so often afflicted, or, if so, does not so constantly produce this specific effect—or for other grave reasons, too tedious to explore; but we certainly much more frequently detect derangement of the stomach in company with a diseased uterus, than with a distressed toe. It is added, that “it no more proves *sympathy*, than the disturbance of the stomach and bowels of the child during teething, proves sympathy between these organs and the gums.” Not a whit more!—probably just about as much. Some other *word* might, probably, arrange this little matter. It is, however, unquestionable, that whatever diseases may be simulated, or however aggravated may be distant symptoms, when the uterus is implicated there are always ample evidences of its complicity clustering about its locality. And in all indications of uterine implication, in the sufferings of a patient, enlightened pathology demands as thorough examination of its intrinsic condition as its nature and position admits, for the purpose both of invoking every aid to a comprehension of the mysteries of disease, and the assistance of direct remedies when available.

As to the treatment of uterine diseases, as far as Dr. Stone's views are shadowed forth on this head, our notions are less conflicting. Specialities of treatment, in their restricted sense, find no advocate in either the communication under review, or its reviewer. Experience and sound pathology alike sanction a judicious selection from our copious pharmacopœia, of special classes of remedies and even particular drugs, for the eradication of disease, according to the peculiarities of the organs, functions, and tissues involved, and of the entire organization. The uterus claims a compliment similar to that rendered to every other leading organ of the body—some special adaptation of remedies to its peculiarities of structure, position, and uses. Opium, mercury and antimony, though invaluable, as a general rule, in the treatment of inflammations, allow of no exclusiveness or invariable application, circumstances often forbidding the resort to either, or strongly urging a selection. The nitrate of silver is no more a specific for diseases of the uterus, to be used in all cases, and to the exclusion of other remedies, than antimony, in pneumonia. And although Dr. Henry Bennet is as deserving of immortality, and is as accurate and complete in his development of diseases of the uterus, as Lænnec, in reference to those of the lungs—and as such, it is abhorrent to our every sense of justice and propriety to have his name flippantly passed by or not alluded to by neophytes in uterine pathology, the whole direction of whose late ideas is owing to his labors—yet, it is

not a matter of doubt, that he will be a most successful uterine practitioner, who, after thorough examination and decisive diagnosis, turns for assistance to "Williams' Principles of Pathology," instead of to "Bennet on the Uterus." A specialist is honorable, infamous or contemptible, according to his instincts, purposes or brains. And specialism, in reference to the uterus, is valuable for diagnosis, and of little worth for treatment.

There are other positions of Dr. Stone, about which expressions of assent or dissent would be agreeable, but the designed length of this article is already exceeded, and the writer's own views and observations will probably form the subject of a future publication. To all advanced in reference to the frequent constitutional origin of uterine diseases, and constitutional indications of treatment—to the "dangers of those engaged in specialities losing sight of general pathology and therapeutics"—the advantages, in certain cases, of mercury, of quinine, &c.—the condemnation of leeches and pessaries—the writer of this is a cordial subscriber. The writer's design has been, with the highest respect for Prof. Stone, to enter a more or less earnest protest against, in his opinion, dangerous teachings for those with whom the authority of Dr. Stone is preëminent.

The successful management of disease exacts an exalted appreciation of its importance, and the application of the physician's most enlarged and vigilant abilities. Any instruction tending to promote superficial attention, or diminish the estimate of the requirements of our art, derogates from the character of our profession, and is of demoralizing influence upon its members. The southern representatives of the healing art should, especially, receive every stimulant to a thorough investigation of the nature of disease and its peculiarities. Thoughts which pander to our indolence or restrict our efforts should be studiously withheld, and our difficulties, preferably magnified, that the standard of excellence may be elevated. Not only the effects of climate, in directing the modifications of disease, solicit our best capabilities, but southern pride, duty and interest appeal to the physicians, as well as to the merchants, planters, and politicians of the south. Our invalids throng the northern resorts, and lavish their thousands in search of health and diversion. Every town of ten thousand inhabitants throughout our southern tier of states, can probably now number one or more of its afflicted females under treatment at New York. And not one in twenty returns cured! With the lights of modern pathology more generally diffused, to direct the many hands and

minds yet required to illustrate the existing mysteries of uterine disorder, and with zeal enlisted in proportion to the importance and complexity of the uterine organization and functions, the difficulties and duration of treatment will diminish, and our family circles be less frequently desolated, by the flight of its invalids for northern succor; and by our curing them more comfortably and rapidly at home, an efficient and honorable guaranty be secured of one department of "southern rights."—*N. O. Med. & Sur. Jour.*

*Mobile, December 15th, 1854.*

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### Instructions for Using Benumbing Cold in Operations.

BY JAMES ARNOTT M. D.

Although there are several modes of employing intense cold as an anæsthetic, I shall here confine myself to the most simple and generally applicable of these, viz: the placing a frigorific mixture immediately on the part, or with the interposition only of a piece of thin gauze or tulle containing it. This piece of gauze (formed for the sake of convenience, into a small net or bag,) the components of the frigorific mixture, a canvass bag or coarse cloth, a mallet or flat iron, a large sheet of paper, a paper-folder, and a sponge, constitute all the articles required for congelation. The common frigorific of ice and salt will generally possess sufficient power; when greater is required, saltpetre or an ammoniacal salt may be added. Every systematic work on chemistry contains tables of frigorific mixtures, as well as instructions for making ice which, when but a small quantity is required, may be thus artificially procured almost at as little expense as from the fishmonger.

A piece of ice the size of an orange, or weighing about a quarter of a pound, will be sufficient for most operations. It is put into a small canvass bag or a coarse cloth, and beaten, by the quickly repeated strokes of a mallet or a flat iron, into a fine powder. As it is important that the powder should be fine, it is not ridiculously minute to state, that the bag should be turned in various directions during the pounding, and that the pounded ice, squeezed into a cake by the iron, should have its particles again separated by rubbing the bag between the hands. Instead of pounding it, the ice may be pulverized by the ice-plane.

The pounded ice having been placed on a large sheet of

paper, any loosely-cohering may be separated by a paper-folder, and the unreduced larger bits removed. Beside it, on the paper, about half the quantity of powdered common salt is placed, and they are then quickly and thoroughly mixed together, either by the ivory folder while on the paper, or by stirring them in a gutta percha or other non-conducting vessel. If the mixture be not quickly made, the extreme cold of one part of it may again freeze other parts into lumps.

The mixture is now put into the net (which may be conveniently supported and preserved from contact by placing it in the mouth of a jar crewer,) and as soon as the action of the salt on the ice appears established by the dropping of the brine, it is ready for use.

In applying the net, the part which is to be benumbed should be placed in as horizontal a position as possible; and it is well to raise the net for a moment every three or four seconds, in order to secure the equal application of the frigorific, and watch its effect. If the part be not horizontal, it may be necessary to hold the gauze bag containing the frigorific against it by the hand covered with a cloth; and if the net does not cover the whole of the surface to be benumbed, it must be passed to and fro over it. A moistened sponge placed lower than the net will absorb the fluid escaping from it, or this, on some occasions, may be allowed to drop into a basin placed beneath.

This procedure, as now described, may appear not only troublesome, but as requiring much time. The truth, however, is, that after one or two trials it is unlikely that any mistake will be committed, and the time occupied by the preparation of the mixture and its application should rarely exceed five minutes. So simple is the apparatus required, that, in cases of emergency, I have frequently procured everything but the ice at the house of the patient. The application of a solid brass ball which has been immersed in a freezing mixture, or a thin metallic spoon or tube containing this (with or without ice,) is quite as easy.

The effects of this mode of applying intense cold are various, and their succession is as follows: When a well prepared frigorific mixture is brought in contact with the skin, a certain degree of numbness is immediately produced. The skin is rendered paler than natural, but there is hardly any disagreeable sensation produced, not even of cold. In about half a minute the whole of the surface in contact with the frigorific becomes suddenly blanched, evidently in consequence of the constriction of its blood vessels. This change is accompanied with a feeling of pricking or tingling, such as

that produced by mustard. If the application be continued, a third effect is produced; the adipose matter under the skin is solidified, and the part becomes hard as well as white. The tingling is increased by this; but, unless in the most sensitive parts of the body, as the hand and lower part and front of the forearm, it is rarely noticed or complained of. Although this uneasy sensation soon subsides, there will, if the temperature of the part be not allowed gradually to return, and if the cold has reached the stage of congelation, be a renewal of it on the adipose matter again becoming fluid. This gradual return of the natural heat is ensured by placing a little powdered ice on the part, or a thin bladder containing ice and water.

The question how far the refrigeration should be allowed to proceed, or which of the three stages just described should be reached, has been answered differently by different operators. In many of the slighter operations, either of the first stages will be sufficient, and the measures just mentioned for effecting a gradual return of heat will then be unnecessary. If congelation of a fat is produced, and the operation is proceeded with before it returns to its fluid state (which is of advantage when it is important to prevent bleeding,) there may be required, as Mr. Paget has observed, a modification in the handling of the scalpel; not only, however, is there a certainty that the insensibility both in degree and continuance will be then sufficient, whether the incision is made before or after the fat again becomes fluid, but (what is of equal importance) that antiphlogistic effect is secured, which prevents those consequences which so often prove fatal under common circumstances. On other points there have been great differences of opinion, though probably the results have not been so different as might have been expected. Dr. Wood of Cincinnati, and M. Richard of Paris, use frigorifics differing from each other in power, as much as 30 deg. F.; and Mr. Ward applies the frigorific for only one minute, while Dr. Hargrave applies it for five. Perhaps the longer congelation is continued (and it may safely be continued for double this period) the deeper and the longer continued the produced anæsthesia may be; but it were unreasonable to prolong an operation inconveniently in order that there shall be absolutely no feeling. In exhibiting chloroform the surgeon is not authorized to give a very large and very dangerous dose in order that the insensibility shall be absolute. But if it should appear that a certain continuance of congelation is necessary to ensure its antiphlogistic power, this would be a sufficient reason for always so continuing it.

As respects the credit of the two anæsthetics in the deeper operations, not their real character or merit, chloroform has this advantage over cold, that whereas, from the obscure expression of pain during the patient's unconsciousness from chloroform, and his forgetfulness of it afterwards, it is generally supposed that he suffers none; so, on the other hand, there may be greater complaint made in such operations under cold than is justified by the degree of pain felt, owing to the patient's disappointment (if the matter has not been explained to him beforehand) in experiencing any degree. It is certain that in the majority of operations, or those only involving the skin, the insensibility produced by cold is greater than that produced by the ordinary doses of chloroform; and on this account Dr. Wood thinks it ought, in all suitable cases, to be preferred; but this is a small advantage compared with its perfect safety, and the power it possesses of preventing dangerous inflammation. To its superiority in these important respects must be added the facility with which it may be administered, the retention of the patient's consciousness, and the absence of his dread of sudden death, as well as of the sickness and headache that generally follow chloroform, the freedom from embarrassing hæmorrhage, and the assistance which the patient may give to the operator in assuming convenient postures, instead of its being necessary, as in using chloroform, to have an assistant to repress his involuntary movements and struggles.

A few words may be added, in conclusion, on certain misapprehensions that have existed in relation to the use of cold as an anæsthetic.

Dr. Wood states, that although congelation has, in most instances, fully answered his expectations, it has at other times disappointed them. If it be expected that the whole of the pain of a deep operation, as the amputation of a limb, or the excision of a large tumor, is to be thus prevented, the expectation is unreasonable. Unless the frigorific were applied after, as well as before, the incision of the skin, (and it often may be so with advantage,) or unless it were employed of much greater strength, or for a longer time, than has been usual, and after measures have been taken to suspend the circulation through the part, this could not be effected; and the patient ought himself to decide whether, in such an operation, he shall endure the comparatively slight degree of pain caused by cutting the deeper parts, for the advantage of perfect safety, or undergo the risk of chloroform in order to have the benefit of that degree of insensibility (for it is seldom complete) which the ordinary dose of this substance is capa-

ble of producing. This risk might indeed be lessened were he to have such a moderate dose exhibited as is usually given in midwifery, after the severe pain from the cutaneous incision has been prevented by cold; and this would probably be adequate to the purpose; but as fatty degeneration or idiosyncrasy cannot be foretold, there is danger in every dose. A death from chloroform in midwifery was lately reported in an American journal; and in the nearly fatal case, occurring in France, alluded to in a preceding note, the dose was small, and was intended, as in the midwifery practice, to produce partial insensibility without suspending the consciousness.

Whether chloroform is used or not, I am confident congelation will soon be considered indispensable in every important operation, as a preventive of erysipelas and phlebitis. The fact ascertained by Dr. Fenwick and other statistical inquirers, that one-third of the amputations of the limbs prove fatal from inflammation, leaves no doubt on this subject.

Others of Dr. Wood's failures can be differently accounted for. When the part to be operated upon is inflamed, or the circulation through it is vigorous, "a degree of cold only a little above the freezing point of water" is far from being sufficient. A frigorific of greater strength than 5 degrees below zero (the strength of ice and salt) may then be required, and it must be kept in contact with the skin until the desired effect is produced. There ought to be no failures in this respect, as there are in the use of chloroform. If the part be sufficiently refrigerated, insensibility of adequate degree and continuous is certainly produced.

It has been mentioned as a disadvantage of cold, that its application is painful. In parts which are naturally very sensitive, or have become so from disease, there may be considerable smarting when the third effect, or actual congelation, is suddenly produced; although even then what the patient feels is little when compared with the headache and sickness often caused by chloroform. Under these circumstances, congelation should be gradually produced; but, ordinarily, there is no occasion for graduation of temperature.

It is unnecessary to refer again to the notion, at first entertained by some, that the redness produced by congelation is symptomatic of inflammation. It arises from a state of the blood vessels incompatible with inflammation. So far from causing this condition, there is little doubt that, however valuable intense cold may be as an anæsthetic, it is an antiphlogistic that will be chiefly prized, or as a means of preventing or immediately subduing, with perfect safety to the patient, every inflammation within its reach.—*Medical Times*.

### Radical Cure of Hernia by Iodine Injections.

M. Jobert has presented to the academy an account of three cases of inguinal hernia which were radically cured by injection of the tincture of iodine into the hernial sac.

The first case was that of a young man, aged 18, who was affected with a complete inguinal hernia of the left side. It did not, however, descend to the bottom of the scrotum, and below was separated from the testicle by an elongated constriction. The bowel was readily reducible by the taxis, but immediately the patient coughed or stood on his feet it was again extruded. The patient stated that his disorder in no way interfered with his ordinary occupations, but he was extremely desirous to be completely cured of it, as he was judged unfit for military service in consequence of its existence.

In compliance with the patient's wishes, M. Jobert determined to accomplish, if possible, a radical cure, by injecting the tincture of iodine. On the 12th of May, therefore, having made an incision over the inguinal canal, he introduced a fine trocar, and injected through it five drachms of pure tincture of iodine. The patient suffered some little pain in consequence of the proceeding, and, upon its completion, the wound was united by the twisted suture, and dressed with simple ointment. In the evening, there was slight swelling in the inguinal region, but no constitutional disturbance.

On the 14th, the swelling and redness were considerable, and, on removing the sutures, the wound was found imperfectly united. After some days, however, the redness and swelling disappeared, and cicatrization was accomplished. On the 5th June, the patient left his bed, walked about, and coughed without causing the least unnatural impulse of the abdominal viscera, or the slightest reappearance of an external tumor. The left testicle (that on the affected side) remained of the same size as the right. He was directed to wear a suspensory bandage for some time, as a precautionary measure.

In the second case, the patient, aged 33, was admitted into Hôtel Dieu, on the 18th of November, 1853, with a hydrocele and a congenital inguinal hernia of the same side, and the two swellings being separated from each other by a kind of hour-glass contraction of the tunica vaginalis, the upper part of the sac being occupied with intestine, and the lower with serous fluid and the testicle. M. Jobert resolved, if possible, to obliterate the tunica vaginalis, and so to cure, at the same time, both the hernia and the hydrocele. With this view, having first interrupted the communication between the tunica

vaginalis and the peritoneum, by means of pressure applied to the inguinal canal, he passed a trocar into the lower portion of the constricted sac, and, after having let out the contents of the hydrocele, injected a small quantity of the pure tincture of iodine. On the following day, the scrotum was red and slightly tender, and the affected tunica vaginalis distended with effusion of serum. The patient, however, manifested no constitutional disturbance, and complained of no pain. Day by day the swelling and redness diminished, and, within seventeen days after the operation, the scrotum had regained its ordinary dimensions; but, on the affected side, both it and the spermatic cord were firmer than natural. A cylindrical cord existed through the whole of the inguinal canal, and extended along the course of the spermatic vessels to the testicle. A complete cure was obtained, and the patient left the hospital, able to walk without fatigue, and exhibiting no reappearance of the hernia, in whatever position he occupied. No serious local inflammation, nor any constitutional disorder, resulted from the injection.

The third case was that of a congenital hernia of the left side, quite reducible, and equal in size to a large pear. The patient was twenty-seven years of age, and had been ruptured eight years. He had worn various bandages, in order to counteract his infirmity, only one of which had at all answered the purpose. As the patient ardently desired to be cured of his disorder, M. Jobert, in the presence of his colleagues, punctured the hernial sac, and injected into it a small quantity of the pure tincture of iodine. The patient was then placed on his back, with his legs flexed slightly on the thighs, in which position they were maintained by a bolster. Almost immediately after the injection, the hernial sac began to swell, and in fifteen hours the sac had become as large as if filled with intestine, and communicated a fluctuating half-solid character to the finger. The parts remained in this condition for eight days, after which the swelling rapidly diminished. Twenty-eight days after the operation, the track of the spermatic cord was occupied by a cylindrical substance so compact and hard that the patient was able to rise from his bed, to walk about, and to sit down, without the smallest appearance of an intestinal protrusion exhibiting itself.

The cure remained complete four months after the operation, the testicle had not atrophied, and the inguinal canal was occupied by a firm, solid cord, into which the vaginal process has become converted by its obliteration.

M. Jobert does not allow the tincture to remain permanently in the sac, but withdraws it by means of the syringe. In all

cases of congenital hernia, or whenever the sac is distended with fluid, or is thickened and condensed, and has become adherent to the surrounding structures, M. Jobert penetrates it at once with a trocar, without first dividing the skin with a scalpel; but, whenever the sac is thin, movable and easily displaced by pressure, he prefers to divide the skin with a scalpel, and expose the sac before puncturing it.

The superiority which the method by injection offers to all other proceedings which have been devised for the radical cure of hernia, depends, says M. Jobert, on its harmlessness and simplicity; and M. Velpeau deserves the credit of having, in his *Annales de Chirurgie*, published ten years ago, first noticed the advantages of iodine injections for effecting the radical cure of hernia.—*Gazette des Hôpitaux*.

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**Case of Resection of the Right Elbow Joint for the relief of Caries and Anchylosis of the Joint; cured, with considerable motion at the Elbow.**

BY HENRY H. SMITH, M. D.

Terence ———, aged 16 years, entered the Philadelphia Hospital Feb. 23d, 1854, in consequence of caries of the right elbow and ankylosis of the joint, consequent on a fall.

The disorder having existed for 18 months, and the arm been allowed to become ankylosed in the straight position, he was sent as a pauper to the Alms House and thence to the Hospital. After being in the house about eight months, he was presented to me at the commencement of my term of service in October. At this time, he was pale, anæmic and enfeebled by long continued disease and suffering, and exhibited symptoms of hectic fever; the elbow-joint was very much swollen, and the skin inflamed and thickened round the bend of the elbow, several ulcerated spots and fistulous orifices existing both on the front and back of the arm. On introducing a probe into two or three of these orifices, the bones were readily felt in a carious condition; there was also perfect inability to move the hand in pronation or supination, the least attempt at bending the elbow or pronating the hand causing him severe pain. As his right arm was thus rendered useless, and there was every prospect of his either dying of hectic fever or becoming a pauper for life, I decided on attempting to save the limb by resecting the diseased joint. Accordingly,

on the 11th of Oct. 1854, after an appropriate preliminary treatment, I operated as follows, before the medical class in attendance on the practice of the house.

*Operation.* The boy being fully etherized by a mixture of chloroform 1 part, ether 3 parts by weight, was laid on his belly with his face inclined to the side of the table, and a stout, round pillow placed on the front of the elbow as a support to the portion to be operated on, as well as with the view of favoring the flexion of the fore-arm, after the section of the olecranon process.

The arm being thus steadied, an H incision was made over the joint on its posterior face; the flaps turned up, the ulna nerve dissected out of its trochlea, and held on the front side of the internal condyle, and the artery which accompanied it compressed at a point where it was wounded. Martin's\* circular saw being then applied to the shaft of the ulna, the olecranon process was soon removed, and the whole joint being thus laid open and found to be diseased, both the condyles of the humerus, as well as the epitrochlea, were sawed off by the same saw. The head of the radius being also diseased, it was excised from the neck of the bone by means of large and strong bone-nippers. So little hæmorrhage ensued on the operation that no ligatures were applied. The flaps were then loosely united by sutures, supported by a light bandage, and the boy placed in bed with the arm supported on a pillow in the semi-flexed position, the whole elbow being covered by cloths, wrung out of tepid water. At 8 o'clock, P. M. his pulse was 90, and, as he was suffering, 60 drops of laudanum were given to allay the pain.

Oct. 12th. Slept well, better than for many weeks; suffers but little. Ordered chicken broth and anodyne pro re nata.

Oct. 14th. Removed dressing; suppuration commenced; ordered a light bandage to the part; omit water dressing; tinct. cinchonæ compos. f3iv. per diem; chicken for dinner.

Oct. 16th. Dressed arm and increased the flexion slightly.

Oct. 18th. Applied an obtuse angular splint to the front of the arm; ordered to sit up.

Oct. 20th. Has his clothing on.

Oct. 24th. Applied a splint nearly of a right angle.

After this date the wound was dressed daily, the angle of the splint being gradually changed to a right angle, and then to one which semi-flexed the arm.

Dec. 5th. Terence is now able to do without the splint, and has considerable motion at the joint, the wound being healed.

[\* This saw may be found figured in Smith's Operative Surgery, second edition, plate 5, fig. 1, vol. 1.—EDITOR.]

Jan. 15th. Terence can now move his elbow, so that his hand will traverse an arc of 40 degrees, and can pronate and supinate the hand quite well.

*Remarks.* The advantages of the operation of resection in this case are so apparent as not to require much argument, the saving of a right arm in one dependant on his daily labor for his support, being sufficient evidence of its value as a means of treatment in similar cases.

As a class, few operations are more strikingly illustrative of the progress of conservative surgery than those of resections, yet the number of instances reported in the United States of its application to the upper extremity are by no means commensurate with the cases which might have thus escaped amputation. After a careful examination of a very considerable number of American medical periodicals I find only the following: One by Dr. Thos. Harris of Philadelphia, in 1836; one by Dr. Gurdon Buck, jr. of New York, in 1841, another in 1843, and a third one in 1846; and one by Dr. J. Pancoast in 1842. These cases, with the present one, making only six instances in which this operation has been published. In every case no serious symptoms supervened on the operation, and the patient was relieved of the exhaustion and suffering attendant on the disease, besides obtaining a comparatively useful limb.

The entire head of the humerus was resected by Dr. Hunt of Washington city, in 1818, and a large portion of the same bone (its head) was removed by Dr. Pinckney of the navy, in 1846. When we compare this limited number of operations with the numerous cases of diseased joints that have required it, we must admit that resections of the bones of the upper extremity have not received the attention that the benefits conferred by the operation might naturally lead us to anticipate, and it is with a view of calling professional notice to this useful class of operations that the present case has now been reported.—*Med. Examiner.*

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### Ununited Fracture.

Dr. Henry Smith of Philadelphia has written an interesting communication to the American Journal of Medical Science, on the treatment of ununited fracture by means of artificial limbs, which combine the principles of pressure and motion at the seat of fracture, and lead to the formation of an ensheathing callus.

*LACERATION of the External Abdominal Ring in the Reduction of Strangulated Inguinal Hernia.*—It has been established beyond a doubt, by experiment on the dead subject, that the external abdominal ring may be easily enlarged without any operation, that is to say, without section of the skin, by means of simple traction by the finger.

Nor does the possibility of reducing strangulated hernia immediately after the rupture of the ring appear any longer doubtful. In 10 cases in which the taxis had failed, M. Seutin ruptured the external pillar of the ring, and immediately the reduction of the protruded intestine was effected. We are unable to say whether the laceration is prolonged through the length of the canal. Certain, however, it is, that the resistance offered by the hernia did not prevent the insinuation of the extremity of the index-finger into the canal, and the laceration effected was sufficient to render reduction of the intestine possible. In face of these incontestable facts, it is impossible to pass over the method in silence, although at present it may be premature to express any opinion in its favor. Evidently it cannot be applicable to all degrees and all periods of hernia, for it would expose an intestine highly inflamed or on the brink of gangrene to the risk of rupture; but, nevertheless, it may have its circle of application, and surgeons will do well perhaps not to condemn it prematurely.—*Gaz. Hebdom.*

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*INTRODUCTION of a Stick or Swab-handle, more than Ten Inches Long, into the Stomach—Its Exit by an Abscess—Cure.*—By Francisco Garcia, of Daimiel, (Mancha Baja.) The above is the caption of an article translated from a Spanish medical journal, and published in the Philadelphia Medical Examiner.

It seems that a man was swabbing his throat, and accidentally swallowed the instrument. After 26 days of suffering, an abscess appeared "far below the nipple of the left side." It was opened by a crucial incision. Four days after this the handle of the swab appeared "in the intercostal space formed between the third and fourth false ribs of the left side." With much difficulty it was extracted. "It was followed by a flow of pus, considerable blood and gastric juice through the wound, together with some partially digested alimentary substances, which had been eaten in the morning."

The wound "was completely healed in 26 days from the removal of the stick."

The patient recovered his health entirely, and survived the occurrence seventeen years, when he died of an acute attack of pleuro-pneumonia.

### Prof. Sequard.

We inadvertently omitted to notice in our last number the arrival of this distinguished physiologist. Although he has entered upon his duties late in the session, he is laboring assiduously to make his course as complete as if he had commenced at the usual period. Our opinion of his merits as a lecturer have been expressed in another place.

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### TO APOTHECARIES, MANUFACTURERS OF SURGICAL INSTRUMENTS, &c.

The Medical Society of Virginia will hold its next annual meeting on Tuesday the 24th\* of April next, at the society's hall in Richmond, Va. It is proposed to hold a fair on that occasion, of surgical and philosophical instruments, pharmaceutical preparations, &c.

All who may wish to exhibit articles will please send them to Richmond to the care of the chairman of the committee, or deliver them at the society's hall, over Alexander Duval's apothecary store, Main street, on or before the 1st of April next.

JAMES BOLTON, M. D.	} Committee.
W. W. PARKER, M. D.	
W. B. PLEASANTS, M. D.	
JNO. P. LITTLE, M. D.	
N. F. RIVES, M. D.	

\* Instead of 3rd April, as published in February No.

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The portrait of Dr. JAMES BEALE will be found in this No. of the Stethoscope. He is a native of this city, and here has always been the field of his professional labors. He was elected president of the Medical Society of Virginia in the year 1852.

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We received yesterday from Mr. A. MORRIS the American edition of Dr. FRANCIS K. RAMSBOTHAM'S work on the Principles and Practice of Obstetric Medicine and Surgery, with Notes and Additions, by WM. V. KEATING, M. D., A. M., of Philadelphia.

We have only space at present to notice its reception. We shall speak of it hereafter.





*Lith. of Ritchie & Dunnear's*

*Yrs Truly*  
*Th: P. Atkinson*  
— " —

THE

# STETHOSCOPE.

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THE PROPERTY AND ORGAN OF THE

MEDICAL SOCIETY OF VIRGINIA.

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Edited by a Committee of the Society.

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NO. IV.

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## Removal of an Adipose Tumor, weighing 12 lbs.

BY J. A. HUNTER, M. D. OF LEWISBURG, VA.

Gen. Massie, æt. 53, residing in the county of Raleigh, was the victim of this enormous tumor. Its first appearance was discovered early in life, situated about the second dorsal vertebra. For several years, its development was slow, until its size began to interfere with his dress, as likewise with the ordinary duties of husbandry.

About this time it became a source of uneasiness, affecting, to a partial extent, the free motion of the muscles of the shoulder—whilst, at the same time, it gave great inconvenience to the old gentleman to find a position that would allow him comfortable repose.

In this condition, although comparatively small, he consulted old Governor Floyd, (who had some character as a surgeon,) with the view of having it extirpated. What motives influenced the doctor's mind in regard to its removal, I know not. He certainly refused to operate, and advised his patient "to go home and live as long as he could without having it disturbed." Upon this advice, Gen. Massie had acted up to the time he consulted me, through my friend Dr. Burke.

I visited him at my earliest convenience—found him very

much deformed—much more than I anticipated—extremely anxious about his situation, and feeling the utmost necessity for prompt and speedy relief. I examined carefully the character of the tumor—its size and connections—as well as his ability to stand the loss of blood and irritation that such a dissection must likely set up in a system already worried to feebleness from loss of rest and uneasiness of mind.

I reported to him a favorable prognosis. And whilst our opinion was a source of consolation to the old gentleman, still the warning counsel of his old doctor brought before his mind serious apprehensions for his safety in the use of the knife on the one side, and the inconvenience and fatal results on the other. He however consented to the operation, with fearful forebodings of the result. Whereupon, immediate preparations were made.

Circumference of tumor at base 24 inches; circumference at largest part 32 inches; diameter at base  $8\frac{1}{2}$  inches; diameter at largest part  $10\frac{3}{4}$  inches.

This tumor was situated on the trapezius muscles, occupying the entire space between the shoulders, and covering to some extent the scapular right and left, and upward along the spinal column from about the middle of the trapezius to the fifth or sixth dorsal vertebra, resembling in its general outlines the *agaricus semiglobatus*, (or mushroom.) Having for many years been compressed by the weight of the body, whenever in the horizontal posture, its form must have undergone radical changes, from the fact that its body spread over its base an inch its entire circumference. When sitting, it drew the integuments so tightly across the neck as not only to impede deglutition, but affect the action of the carotid arteries by pressure, as likewise produce a distressing suffocating feeling, unless supported by a suspensory bandage. When in the horizontal posture, it was necessary to elevate the head, but the turning of which to either side would produce all the horrid inconveniences common to the erect posture. Indeed, his suffering had assumed such an alarming character as to convince him conclusively that unless speedily relieved he must soon fall a victim to the oppressive weight of this tumor.

Having carefully taken the dimensions of the tumor and made correct calculations as to the quantity of integuments necessary to cover the space occupied by the base of the tumor—marking out my course with iodine tincture, I went to work. Placed him upon a chair—put him under the influence of chl. ether, its use being regulated by Drs. Burke and Greenlee, with whom I was associated. The operation was very rapid—finding no difficulties whatever, except the neces-

sity of legating a branch of the subscapularis artery. The adhesions were tender, and entirely cellular, except along the spine. The integuments were smoothly brought over the surface, fastened by stitches, supported by adhesive straps, and the whole secured by a gentle compress and roller, in 15 minutes. Tumor weighed 12 pounds.

This specimen I carefully preserved, it being the largest one of the kind I ever saw. It is strictly of an adipose character.

Visited patient next day—found him comfortable and in fine spirits—pulse S9—no hæmorrhage from reaction—placed him in the hands of Drs. Burke and Greenlee, and left for home, a distance of 60 miles, with the promise of early advice. Dr. Burke writes me, that “adhesion took place by the first intention, and in fourteen days was entirely healed.”

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### **Typhoid Pneumonia.**

BY R. W. JANSON, M. D. OF CHESTERFIELD, VA.

Owing to the fatality of this disease, it must necessarily be one of considerable interest to the practitioner of medicine. According to Dr. Dickson, it made its first appearance in Melfield, Massachusetts, in 1806, from whence it continued to extend from village to village, through the middle states, and reached South Carolina in 1815–16, where it was extremely fatal among the negroes exposed to damp situations. It has since continued to make its appearance, during the winter, in the southern and southwestern states—sometimes as an epidemic, at others sporadically.

Some little difference exists among more ancient writers concerning its name; but in the United States it derives its name from the predominance of particular symptoms. As it appears in this section of the country, we are satisfied with the term typhoid pneumonia. In the cases which have come under my notice, the symptoms were variable, but all were preceded by cough of several weeks' duration; of which, however, no notice was taken, as it produced no uneasiness. In some, the disease was ushered in by chill, while others were suddenly attacked with intense pain in either one side or the other; great difficulty of breathing; severe pains in the back and limbs, with prostration of muscular strength, and general uneasiness; skin generally hot and dry; pulse soft and compressible; considerable expectoration of tenacious

mucus, highly tinged with blood; tongue thickly coated with yellow fur, enlarged papillæ, tip and edges red; sordes visible on teeth after a few days; diminished sensibility, &c.

Typhoid fever having been the prevailing disease for several summers past, it was reasonable to conclude that the inflammatory diseases of winter would likely partake of this low grade of fever. Such has actually been the case; and hence I was more fully prepared to treat the disease under consideration.

The following was the plan adopted—and so far as my experience has extended, can be cheerfully recommended:

The lancet was not used; cups, over the seat of pain, were in some cases substituted. Nothing relieved the distressing symptoms so satisfactorily as an emetic of ipecac. and seneka. Calomel, followed by oil or rhubarb, was next given, and the system brought speedily, yet gradually, under the mercurial influence. For the first day or two, a large stimulating poultice was placed on the painful side. Upon its removal, a blister was applied.

As soon as ptyalism had been produced, it was necessary to use stimulants; of which, wine and quinine, in small quantities, were given every hour or two hours, *pro re nata*. In connection with these, seneka, in infusion, given once in four hours, was found to be an invaluable remedy. From its use, all the secretions were more or less increased. The bowels were daily opened with rhubarb, or by enemas. This plan of treatment, you will readily perceive, differs from that used in common pneumonia—first, in the abandonment of the lancet; secondly, the rapid succession in which those powerful remedies were employed to relieve congestion in the organ disposed to take on inflammation—and hence it becomes necessary to begin the treatment as early as possible. Whatever is to be done in the way of combatting inflammation, should be done in the commencement—for the system, laboring under some atmospheric influence, being already in a state of debility, why wait for further prostration? The early and judicious use of stimulants cannot be too highly recommended. It is under their influence we snatch the patient from the very jaws of death, and lead him to a safe and speedy recovery.

**London and Paris Items.**

PARIS, February 10th, 1855.

*To the Editors of the Stethoscope:*

Having taken some part in placing you in your new and responsible position, it is quite natural that I should feel some interest in your success, and as reasonable that I should assist you, however feebly, in the discharge of your important duties. It must be exceedingly difficult for one engaged in the active duties of his profession, without an hour to call his own—it must be difficult, I say, for such an one to consult foreign journals, or prepare an editorial, at the time specially prescribed by the printer.

If what I shall say be in itself neither interesting nor instructive, it may at least suggest some reflections which you may render profitable to your readers.

I propose in this letter to give you some account of the medical men I have seen, &c.

I remained in London six weeks, and spent much of my time in the hospitals, and in hearing medical lectures—feeling special interest in surgery—and heard Professors Skey, Ferguson, &c. frequently. Skey, as you know, lectures at Saint Bartholomew's. His class, as indeed are most of the medical and surgical classes in London, is small. As a lecturer, his style is very good—his descriptions clear and forcible. He is evidently a man who thinks for himself, and most probably thinks well of *himself*. In person, he is exceedingly handsome, though above fifty and quite bald. He seems possessed of a fine constitution, and resembles one of our Richmond doctors very much.

I don't know how it happened that I witnessed no important operation at St. Bartholomew's, since this is the largest hospital in London. Mister Laurence I saw operate once or twice, but the cases were simple, and not such as test the skill of the surgeon. M. L. is a most agreeable man, now far advanced in years. His face is exceedingly pleasant, and I doubt not that he is a man of great merit. In stature, he is quite tall and well proportioned, and will weigh nearly 200 lbs. He, however, begins to bend under the weight of years. Learning I was from Richmond, he enquired with much interest after Dr. C. of our city, his former class mate, and desired to be remembered to him. Mr. Pagett, at this hospital, I only heard lecture once, his hour being inconvenient for me.

Mr. P. is a young man, considering the reputation he has here, or rather in England. His style of lecturing is plain and simple, and reminded me much of the manner of the greatly lamented Prof. Johnson of the medical college of Virginia. Mr. P. is about thirty-five, I presume, tall and thin, and in manner is exceedingly modest. Prof. Ferguson, at King's college, is a miserable lecturer. He seems tired before he begins, and you at first feel as if he would in the middle of his lecture seat himself in utter disgust of his subject. The skirts of his long black gown are in perpetual motion, and his head is not much steadier. His reputation is, however, so great that he is listened to with great attention, and unlike very few others, he often extends his discourse beyond his hour, without creating a disturbance among his auditory. Prof. F. stated in one of his lectures, that he never removed a particle of integument in any operation in which it could possibly be avoided—not even in case of the largest tumors. I have seen an opposite course pursued often.

There is a young man recently appointed professor of physiology in this college, who bids fair to become a distinguished man. He is not more than twenty-three years of age, but his lectures are most admirable, illustrated by varied and most skillfully executed experiments. With a fine, bright face, commanding figure and most graceful elocution, he will even now compare favorably with the best lecturers of Europe.

While in London I fortunately met with Mr. Jones of Jersey, who has, as you know, acquired some reputation in the operation of resection of the knee joint. Mr. J. presented to the class of Mr. Erickson, professor of surgery at the university hospital, a most interesting morbid specimen, illustrative of the value of his operation. This specimen consisted of the bones of the lower extremity of a patient, from which two inches of the lower end of the femur had been removed, including the condyles of course. In the operation, however, the tendon of the patella was left intact. Strange to say, nature had so entirely relieved the deformity, that at first sight you would have looked upon the case simply as one of common ankylosis. The condyles were completely reproduced, and the limb but slightly shortened, say about an inch. The patient lived two years after the operation, engaged in some active employment, and died from causes entirely independent of the operation. Mr. J. stated that the patient was not scrofulous, and that he will not operate in such cases.

By the way, while attending this lecture of Mr. Erickson, I saw him remove the great toe of a girl by the aid of the freezing mixture, but not without giving the poor creature

much pain. Mr. E. said he had rarely succeeded, where it was necessary to divide *deep seated* parts. Mr. Nelaton removed the toe nail of the great toe of a man here with this mixture, and without pain, although the application was not so long or so well made. If the application were made *long enough*, I don't see why it would not succeed, at least in the extremities.

As perhaps no member of your honorable body has ever thumbed as frequently as myself Watson's Practice, you may not feel as much interest in this gentleman as myself. His admirable work was my text book at college, and has been my hand book since. Dr. Watson is not now connected with any hospital, but is in the enjoyment of a fine practice in the "West End." He never visits patients in the "city." In statue, he is quite imposing. Upon an immense pair of shoulders reposes an immense head, with a prodigious anterior development. Added to these imposing features is an air of the greatest gravity. His measured and deep-toned words issue from his larynx like the low, solemn notes of some huge church organ. He seems almost incapable of excitement.

I fear I have already wearied you on the subject of London doctors; but I cannot omit in this connection the name of Sir Benjamin Brodie, than whom perhaps no man in England, or Europe even, stands higher among our countrymen. Sir Benjamin is the antipodes, complete of Dr. Watson. There is no man in your honorable body who would not compare pretty well with the great English surgeon. I had labored under the silly but not very singular notion that Sir Benjamin was a man of six feet one or two inches, with massive shoulders, and everything else in keeping, whereas in fact he is about 5 feet 6 inches, and weighs not more than 120 lbs. While, however, his statue or "bodily presence is contemptible," his eye has something of genius in it. His face is rather aquiline, and exhibits much activity and vivacity of expression. He speaks freely and fluently, and seems to have paid some attention to politics as well as to surgery. From the activity of mind and body which he possesses, it is to be hoped he will yet long remain an ornament to the profession. His practice is chiefly, I believe, of a consulting character.

Feeling some interest in the subject of *porter*, finding it often proper to use it myself in the summer, and frequently prescribing it for others, and moreover having heard such disgusting accounts of the mode of brewing in London, I concluded to visit one of these establishments. I was very politely shown over the entire establishment of Messrs. Read & Co., and was

gratified to find that there is no truth whatever in the common opinion, (so common that it has gotten into medical books of high authority,) that the London porter is made from the foulest water of the filthy docks of that great city. One of the agents informed me that many years ago, before the Thames was the common sewer of the city, that it is probable those breweries near the river procured the necessary amount of water from thence, but that such was not the case now. The water at Messrs. Read & Co.'s establishment is procured by means of two wells between 200 and 300 feet deep, passing through a thick stratum of chalk, in order to avoid the city drainage. From these wells the water is thrown by steam to the top of the immense establishment, whose tanks receive it, and from whence it is distributed to the "cooling rooms," &c. This water is pure and delightful. To give you some idea of the immensity of this establishment, I will simply state that some of the vats contain 1200 barrels of liquor, and that from 7 to 8,000 barrels are turned out per week. One hundred horses are employed about the establishment, and in conveying porter through the city. The stout is, I think, better than any I ever drank in Richmond.

I had intended to devote at least one-half of this letter to medical subjects appertaining specially to Paris, but I find I shall have to postpone any lengthy consideration thereof for another letter perhaps, as my time has run out.

I have attended the hospitals here regularly for nearly two months, and express no very uncommon opinion among Americans here, when I say that French surgery is certainly, all things considered, no better than American surgery. In the matter of operations, they (the French) are perhaps equal to any others, but the after treatment of the patient is often most abominable. I have never seen such miserable bandaging by any American surgeon, of one year's experience, as I have seen practiced by the very first surgeons in Paris. The surgeon here seems to concentrate all his powers on diagnosis; and the patient, when for the first time he is submitted to his notice, receives a most searching and a most admirable examination. If no operation is required in the case, it afterwards receives but little attention from the surgeon, unless it possess points of peculiar interest. The fact is, the wards here committed to *one* surgeon are too extensive. It is impossible for any man to examine and prescribe for from 1 to 200 patients in an hour, or an hour and a half.

I have really been amused, when I have occasionally gone into the *medical* wards, to witness the nature of the examinations there. I have seen several big, fat Frenchmen prescribe

for a dozen patients, without *touching* them or even asking them a half dozen questions each, and frequently omitting to look at the tongue. These physicians were old men—too old for the labor required of them.

The single operation which has interested me more than any other since coming here, is that frequently and very successfully practiced by Jobert, at hotel Dieu, which consists in injecting with pure iodine hernial sacs of any size. In several cases of small sacs, I have seen cures effected; and there is an old woman at the hospital, who has an immense sac of 23 years' standing, which has been injected with, it is true, not *complete*, but certainly very important advantage. The mouth of the sac was so large that, I imagine, the opposite sides could not be kept in contact. If you examine the sac now, you will find it much shrunken, and containing a body of thickened tissue, resembling, to the feel, an enlarged testicle. Strange to say, that little pains is taken to prevent the iodine penetrating the cavity of the peritonæum. It is supposed that no severe inflammation would follow such an event, but upon what grounds I am at a loss to divine, when it is seen what takes place in the *sac* itself.

But I must conclude, by subscribing myself

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### Case of Catamenial Retention from Imperforated Hymen.

BY WM. G. CRAGHEAD, M. D. OF DANVILLE, VA.

The chief point of interest in this case is, its "wearing the livery" of epidemic intermittent, as manifested by a daily paroxysm of three or four hours' suffering. I was called to see Miss D. on the 15th December 1846. Her mother informed me, that for the last two or three mornings, she had been seized at 11 o'clock with most violent neuralgic pains extending down the inner side of the thighs, which continued till about 3 o'clock in the afternoon; and from this time she was comparatively comfortable till the same hour the next morning.

I saw that she must be approaching the state of puberty, and ascertained that she was in her fifteenth year, had never

menstruated, but had suffered similarly, though less violently, twice before, at an interval of three or four weeks. After a brisk cathartic, I prescribed opiates when she was in pain, and the administration of a large dose of quinine and laudanum, an hour before the paroxysmal attack of the next day. On the 24th I visited her again, when I found her apparently pretty well. Although I did not suspect the real condition of her case, there being no abdominal or pelvic pain, yet I came to the conclusion, that a struggle was taking place to bring about the menstrual function; and with this idea, gave her mother the usual directions "made and provided" for such cases; and advised the use of laudanum and quinine, if there should be a return of the paroxysmal pain.

I heard nothing further from her until the 20th of March, when I learned that she was again confined, and had suffered pain in January and February, but by persisting in the free use of laudanum for a few days, had been relieved as before. As she lived some distance from Danville, I did not see her from December until the 3d of May. I was then summoned early in the morning to visit her, and informed by the messenger that she was very ill, got worse every day, and her mother did not think she could survive such a spell as she had the day before. On this occasion, Dr. N. T. Green met me a little after 9 o'clock. We found her free from any severe suffering, though feeling a constant uneasiness from distension of the abdomen and uterus. The pain, which now was of a bearing down character resembling the pangs of labor, still commenced at the usual hour in the morning, and lasted as before till 3 o'clock in the afternoon, each succeeding paroxysm being augmented in violence. The patient had an irritable pulse, anxious expression of countenance, and had lost flesh since I saw her last. Upon examination, we found the external organs only moderately developed; the mammæ of virgin size, and manifesting none of the ordinary sympathies with the change in the uterus. A circumscribed tumor above the pubis, and an imperforated hymen at the entrance of the vagina, presenting exteriorly a protuberant convexity from the monthly accumulation in the vagina and uterus, at once satisfied us of the nature of the case. And it being evident that the vagina was distended to its utmost, there seemed to be no necessity for any special guarding of the bladder or rectum; so, we at once anticipated the expected paroxysm, and a crucial opening in the membrane with a bistoury proved antiperiodic, and gave her more ease than all the narcotics she had ever taken. Rather over three half pints of a thick, tarry looking fluid, neither putrid nor coagulated, was slowly

discharged. The abdominal distension was immediately removed, and the patient soon got well.

I will here mention two other cases of a kindred nature, not because "*magna pars fui*," but as showing the pro rata number of such cases that in a practice of twenty years has fallen to my charge.

October 7th, 1845.—The case of a German lady fell under my observation, in which an unruptured hymen caused great difficulty in the passage of the child's head, and some slight laceration.

On 10th May 1839, I met with a case of retention from occlusion of the vagina, in the person of a very stout negro woman of about sixteen, hired to Mr. S. Slate. I afterwards learned that this adhesion must have resulted from inflammation caused by a rape committed on her before she was twelve years old, and which was followed by a purulent discharge from the vagina. I had seen her two or three times this year, when she appeared to be laboring under a most violent attack of colic, with irritable stomach, constipation and tumefaction of the abdomen. She had now been closely confined for several days, and suffered greatly from abdominal pain and soreness; and I learned that she had been subject to periodical attacks, where she lived the year before. Upon examination, I found that the vagina, at a distance of an inch and a half, terminated in a cul de sac, through which no aperture could be detected. I stretched the sides of the vagina apart, with a double bladed speculum, and pressed for some time the point of a female catheter against the bottom of the sac, without finding any aperture. After withdrawing the instruments, strong uterine contractions came on, and the adhesion so far gave way as to permit the exit of the menstrual fluid, which, from the quantity, must have been accumulating for more than twelve months. After this, there was no mechanical obstruction to the menstrual excretion. The patient died about a year afterwards, of mesenteric and peritoneal disease, when Dr. Green assisted me in a post mortem examination. The appearance of the uterus was normal, but an hourglass contraction of the vagina continued.

### **"What to Observe in Medical Cases."**

THE above is the title of a modest little volume, presented to the public under the authority of the London medical society of observation.

Its design is to furnish such a method of arranging the clinical and anatomical phenomena of disease, as will secure greater accuracy and precision, and that measure of uniformity which is necessary for the successful comparison and analysis of medical observations.

Nothing has in a greater degree hindered the progress of rational medicine than the want of capacity, faithfulness and industry on the part of medical observers.

How often is it the case, that meagreness of detail in the reports of medical cases is utterly destructive of their value, rendering them but little else than the reflected images of theoretical minds. Only such facts are recorded as seem to sustain the favorite theory. As well might the naturalist be expected to derive minute and reliable information, by studying the landscape representations of a country, as for the medical philosopher to attain to safe conclusions from such observations.

"Medicine is enriched only by facts;" and these must be noted with daguerrean precision and faithfulness.

A witness in the court of scientific enquiry should testify as if under the solemn sanctions of an oath. He is bound to testify to **THE WHOLE TRUTH**, and is otherwise a culpable and dangerous witness.

The society of medical observation has rendered an important service, by indicating fully "what to observe in medical cases." But their labors will serve to create in many minds a demand for an answer to another query, viz: How to observe in medical cases?

The faculty of patient, accurate observation, is a rare one.

It can only be developed and matured by thorough mental discipline.

But this clearly illustrates and brings us at once to the great argument in favor of the thorough previous training of those who enter the field of observation.

We will not again enter into the discussion of the importance of preliminary education. This has been often urged through our pages.

To observe accurately all the phenomena of disease, and to avoid all the sources of fallacy in drawing reliable practical deductions therefrom, is a task for the astutest mind, thoroughly indoctrinated in the methods of scientific investigation.

To secure, then, valuable medical observations, the first step is to commission only competent observers. If, then, the desire is entertained to collect a vast amount of reliable scientific data, and thus to advance rational medicine and maintain the respectability of its cultivators, the reader may be assured that these ends can only be attained by the thorough educational training of those who enter upon the work.

The whole responsibility, then, devolves upon the schools of medicine. Is the system of instruction in these latter inadequate and vicious? Are these institutions regarded and managed as the mere money making machines of the lecturers—ready to lower the standards of attainment to the meanest capacity?

So long as such a state of things obtains, it is folly to hope for such results as will redound to the honor of American medicine.

The most minute directions may be given as to "what is to be observed in medical cases;" but unless the corps of observers are prepared for their difficult duties, by that previous discipline which imparts robustness of intellect, acuteness of perception, of comparison and analysis, the phenomena of disease and health, with all their recondite modifications, will be presented to "eyes that see not," and to minds incapable of their rightful interpretation. W.

### Bibliographical Notices.

#### *Nineteenth Annual Report of the New York Institution for the Blind.*

We learn from this report that two hundred and five blind persons are now receiving instruction or the means of support from this noble institution. In addition to an expose of the affairs of the institution, the pamphlet contains a sketch of the European institutions for the blind by Dr. J. G. Adams, being the results of his observations during the years 1853-4. In the Parisian school the instruction is carried on by one seeing superintendent and twelve blind professors. We call the attention of the managers of our state institution to the following remarks.

"Experience has proved," says M. Du Fau, "that no master is better for the blind child than one who, born in the same state of infirmity, has known how, by persevering efforts, to triumph over obstacles which nature has imposed upon him. No one can better guide the child in a road which he has himself traveled, and whose aspirations are so well known to him." B.

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#### *The Principles and Practice of Obstetric Medicine and Surgery—the American Edition—by FRANCIS H. RAMSBOTHAM, M. D.—with Notes and Additions, by Wm. V. Keating, M. D., A. M.*

In the March number of the Stethoscope we noticed the reception of this volume, and promised to speak of it more at large on a subsequent occasion. Since then we have examined its contents with some care, and must express our high appreciation of its value. To write an extended review of the work, however, would not only far transcend our limits, but would consume more time than we have at our command. We may be allowed to conclude this brief notice, by inserting an extract from the letter of Dr. Hugh L. Hodge, addressed to the publishers.

"The work needs no commendations from me, receiving as it does, the unanimous recommendation of the British periodical press, as the standard work on midwifery; chaste in language, classical in composition, happy in point of arrangement, and abounding in most interesting illustrations."

"To the American public, therefore, it is most valuable, from its intrinsic undoubted excellence, and as being the best authorized exponent of British midwifery. Its circulation will, I trust, be extensive throughout our country."

We will only add, that the student will learn from it all he need to know, and the practitioner will find it, as a book of reference, surpassed by none other. H.

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### Opinion of John M. Patton, Esq. on the Constitutionality of Taxing Physicians.

As some allusion was made to the following article in the editorial in the March number, we have thought proper to give it entire, as many members have not seen it, and the subject will probably be brought before the medical society of Virginia at its meeting in April next.

By the tax laws of June 1852 it is provided, "that the commissioners of the revenue are to assess and deliver a certificate of license and the amount of tax to be paid by them, to all attorneys at law, physicians, surgeons, dentists and daguerrean artists." The same law contains a list of various other persons required to obtain licenses, such as merchants, &c. (Acts of 1852, p. 11, § 1.) That there shall be paid "on every license to a physician, surgeon or dentist, \$5." And furthermore, "if the yearly *income* derived from the practice of any of said callings or professions" of physician, surgeon or dentist, during the year next preceding the time of obtaining license, shall exceed four hundred dollars, and such excess be less than six hundred dollars, there shall be an additional tax thereon of one-half of one per cent. If such excess be six hundred dollars and less than one thousand dollars, there shall be an additional tax thereon of three-fourths of one per cent. If such excess be one thousand or more, there shall be an additional tax thereon of one per cent. But in no case shall such tax exceed fifteen dollars.

And my opinion has been asked as to the validity and constitutionality of the said provisions.

Under the constitution, as it stood prior to the late convention, there was no restraint on the power of the legislature as to the taxation of *persons* or *property*.

By several laws passed prior to the late convention, it was

provided—Sessions Acts 1842-3, p. 9, ch. 2, § 7; *Ib.* p. 6, ch. 1, § 5—that a tax should be assessed on all incomes derived from any office, calling or profession, (except from labor employed in any mechanic art, trade, handicraft or manufacture,) over and above four hundred dollars. But an attorney, physician, surgeon or dentist might commute this tax on his income by electing to pay a specific tax of ten dollars, (or twenty dollars, if an attorney practicing in the court of appeals.) In addition, every dentist was required to obtain a license to practice dentistry, on producing a receipt for the payment of the above.

This, I believe, was the first law imposing a tax in this state on a man's calling or profession, though licenses to sell merchandise, and for various other pursuits, had been long previously required by law.

By the act of 1847-8, the law as to attorneys, physicians, surgeons and dentists, was changed, so as to substitute a specific tax absolutely of five dollars on each, except attorneys in the court of appeals, who were to pay ten dollars; and the law remained, I believe, as in 1842-3 in other respects, except that there was no income tax on receipts over four hundred dollars, other than from salaries, or the dividends of incorporated companies.

By the Code of Virginia, the specific tax on physicians, surgeons, attorneys and dentists was continued; and no income tax was imposed, except on salaries, *fees* of some office, profession or calling, dividends of incorporated companies, and income derived from interest or profit arising from money loaned, bonds, notes, &c. *Vid.* Code of Va. p. 187, § 52, 53, 54; *Ib.* p. 213, § 1; *Ib.* p. 217, 18, § 1.

However much the injustice and inequality of a tax imposed on the income derived from one set of professions or callings dependent on intellectual culture or manual skill—or imposing a tax on them, while the same or larger income (as well as the persons receiving it) derived from other *callings* or employments were wholly exempted from taxation, was complained of, and however the policy of imposing such tax on such incomes or on such callings or professions was questioned by many, yet I believe there was no serious question of the power of the legislature, under the former constitution, to impose such taxes and make such discriminations. But by the new constitution it is provided, in article fourth, under the head of the legislative department, as follows:

“§ 22. Taxation shall be *equal* and *uniform* throughout the commonwealth, and all *property* other than slaves shall be taxed in proportion to its value.

“ § 23. Every slave who has attained the age of twelve years shall be assessed with a tax equal to and not exceeding that assessed on land of the value of three hundred dollars. Slaves under that age shall not be subject to taxation, and other taxable property may be exempted from taxation by the vote of a majority of the whole number of members elected to each house of the general assembly.”

(The twenty-fourth section relates to the capitation tax and its appropriation, and need not be more particularly recited.) Then comes

“ § 25. The general assembly may levy a tax on incomes, salaries and licenses ; but no tax shall be levied on property from which any income so taxed is derived, or on the capital invested in the trade or business in respect to which the license so taxed is issued.”

And the question is, whether these provisions affect the validity and constitutionality of the existing tax on physicians and surgeons.

It has been suggested that physicians and surgeons are not liable to tax, because they are not recognized by the law as a distinct class—because every man, no matter whether he has a diploma or not, may set himself up as a practitioner of medicine or surgery. That is all true ; but still I do not see how that affects the question whether a person undertaking to practice medicine or surgery is liable to taxation as such. The function and business of a physician or surgeon is as well known and as familiar to every one as those of a merchant or a carpenter. Although any person may, with or without qualifications, and with or without any previous study, set himself up as a physician or surgeon, and offer to practice as such, he does so under heavy civil and criminal responsibility for the consequences of his ignorance and presumption, if he be unfit and ignorant. But still, if he proclaims himself as a practitioner of these professions, as he has a legal right to do, he cannot object on that ground that he ought not to be taxed, because he is not regularly educated and qualified as such.

The law having prescribed no criterion by which it can be ascertained whether a man is a physician or not, his own claim and offer to practice as such is all that can be required to fix the character on him. I presume the commissioner would be bound to issue a license, under the law, to practice physic or surgery to any person who should claim to be such, and apply for such license, and pay the tax.

The constitution, however, provides that taxation throughout the commonwealth shall be *equal* and *uniform*. Is that

consistent with the imposition of a tax on doctors and lawyers, for a license to practice their professions, when no such license is required for many other callings and professions? For example, the profession of a minister of the gospel, the profession of a farrier, or the calling of a dancing master, a carpenter, or other person engaged in any mechanic or handicraft art.

Although the constitution requires that taxation shall be equal and uniform, yet the same constitution authorizes the legislature to levy a tax on licenses. From the nature of the subject, as it does not require that no pursuit or occupation shall be carried on without a license, it must necessarily be implied that the legislature is to prescribe what pursuits and occupations, calling or business, shall not be carried on without a license; and consequently the legislature must have the right to prescribe the amount of tax which shall be paid for any such license. To that extent, the twenty-fifth section operates as a qualification of and exception to the general principle incorporated into the constitution, that taxation shall be equal and uniform throughout the commonwealth.

But there is another point of view in which the question, as to the constitutionality of the law taxing physicians and surgeons, as it now exists, is more questionable.

The law not only imposes a specific tax of five dollars on each physician or surgeon, but it goes on to impose an additional tax upon the *income* of each physician and surgeon during the year preceding the time of assessment. This is in terms, as it plainly is in spirit and effect, an income tax. A tax on a license is a tax for a privilege hereafter to be enjoyed. An income tax is a tax on what has been already received. And the question is this, Can an income tax be levied on the income of a particular class of persons, when no *income* tax is levied on other classes of persons, without violating the letter and spirit of the constitution? "Taxation shall be equal and uniform throughout the commonwealth:" "But the legislature may levy a tax on incomes, salaries and licenses." May taxes be levied on *incomes*, *salaries* and licenses without regard to *equality* and uniformity? Would it be competent to the legislature to say that on the income of a physician or a lawyer on the western side of the Alleghany a tax of one per cent. should be paid, but that on the income of such a person on the eastern side of the Alleghany it should be two per cent.? Every one would readily agree that such a discrimination would be unconstitutional. Why? Only because the constitution prescribes that taxation shall be equal throughout the commonwealth. But the constitution

requires that taxes shall be not only equal but *uniform*. It is an insult to the understanding to say that a tax on income is uniform, when it is imposed on the income of one set of men and the income of another is exempt. The whole question, then, I take it, is, Whether the provision requiring equality and uniformity is general and universal, except so far as the constitution expressly or by implication qualifies it, or whether that provision has no application to taxes imposed by virtue of the twenty-fifth section, as to incomes, &c.

There is nothing in the nature of a tax on incomes or salaries, which makes it necessary that the legislature should have an arbitrary and unrestricted right to impose such tax on one class of persons or one class of officers, and exclude others.

It seems to me, therefore, that while the legislature may raise all the necessary taxes without resort to a tax on incomes, that if they impose an income tax at all, it must be uniform on all incomes, and at an equal rate of assessment—and therefore that so much of the tax as is now exacted of physicians and surgeons on their incomes is unconstitutional, since no such tax is imposed on lawyers, mechanics, &c., &c.

I think, too, that the present tax is unconstitutional, for another reason.

The graduation plan adopted in the law seems to be plainly obnoxious to the constitutional objection, that even between physicians themselves the tax is not equal. Thus, a doctor whose income above \$400 is \$599, is required to pay an income tax of \$2 99½; and one whose income above \$400 is \$600, is required to pay \$4 50 income tax; and one whose income above \$400 is \$999, has to pay \$7 49½; while one whose income above \$400 is one dollar only more, or \$1,000, has to pay \$10. And further, a doctor whose income above \$400 is \$1,500, has to pay \$15, while he whose income is \$5,000 pays no more.

It is impossible not to see that this, whether regarded as a license tax or an income tax, is grossly *unequal*. And if I am right in supposing that the provision for uniformity and equality is applicable to taxes on incomes, salaries and licenses, (so far as practicable,) as well as in respect to property, (where not otherwise specifically declared,) this law must be unconstitutional.

I am aware that if these objections to the law in question be valid, they go much deeper, and would bring in question the merchants' tax and the tax on incomes from interest and stocks, and on salaries.

I know, too, how reluctant the courts are to declare acts of

the legislature to be in violation of the constitution; and I am aware of the probability that they will be much more so now, when the law may be, in the particulars in question, popular.

It is, therefore, not improbable that my opinion will not be in accordance with that of the courts.

*April 5th, 1853.*

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### Observations on Ligature of the Gluteal Artery.

BY WARREN STONE, M. D. &c. UNIVERSITY LA.

With a recent Case—Reported by A. S. Fox, Resident Student Charity Hospital.

John Spark, a boy of ten years, from the town of Galveston, Texas, was brought to the Charity hospital on the evening of the 6th of February, having a large pulsating tumor in the gluteal region. Dr. Randall, who accompanied him, stated that on the 28th of December previous, a penetrating wound had been inflicted in the gluteal region by a narrow bladed knife, some hemorrhage ensued which had ceased of its own accord when he saw him two hours after. The wound healed kindly and the patient was out again in three days, and rode on horse back, had no soreness in the part. On the evening of the 3d of January he was seized with a lancinating pain in the gluteal region, and pains in his knee and ankle of the same side on the 4th. Dr. R. saw him, discovered no signs of aneurism. 5th, Dr. R. saw him again and discovered a tumor in the gluteal region pulsating isochronous with the arterial diastole. This he discovered to be a false aneurism. In spite of compression and every means he used to prevent its increase, it grew rapidly for five days and then ceased to increase so fast. Dr. R. now proposed to operate by tying the gluteal artery, but the scientific of Galveston did not seem disposed to acquiesce and assist in the operation, consequently he desisted. The pain grew more severe and the patient began rapidly to decline from loss of sleep and suffering, so the doctor resolved to bring him to this city. Large opiates were administered pro re nata to procure rest, and the patient arrived on the 6th of February—presenting the following symptoms: Pale and emaciated; pulse 140; very feeble; loss of appetite; a large tumor in the gluteal region pulsating isochronous with the arterial diastole; severe pain in the hip, and a numbness throughout the leg with occasionally starting pains in the knee and ankle. A large dose of morphine was given

him at night to procure rest. Dr. Stone saw him on the following morning and determined to ligature the gluteal artery. Accordingly having had the patient placed upon the table he proceeded—in the presence of the medical class—assisted by Drs. Choppin, Beard and Randall. He made an incision across the top of the tumor following the course of the fibres of the gluteus major muscle, eight inches in length, scooped out the coagulated blood, the sac being freely opened, and placed his finger upon the artery to control hemorrhage—a ligature was then placed around the artery, and a compress of lint gently applied to stop a slight oozing which existed from the neighboring parts. The wound was drawn together by adhesive straps, an opiate was given and the patient put to bed.

8th.—Patient is doing well—pulse increased in volume, not so fast, and complain of no pain, except of lying on one side.

9th.—Looks much better—countenance looks brighter—appetite improving—pulse 120.

10th.—Still improving—has had each night since the operation, a small dose of morphine to procure sleep; think it is required more from habit than from pain.

11th.—Much better; appetite good; had an operation on his bowels this evening; slept well during the night; wound is suppurating freely.

12th.—Still improving, has no pain except from lying on one side; appetite still good; dressed the wound with a weak solution of chloride of soda; required very little morphine last night.

13th.—Still improving.

14th.—Looks very well, but has a tendency to diarrhœa; this yielded readily to a little chalk mixture with catechu; continued doing well till the 19th; his pulse being small and feeble, with some tendency to febrile paroxysms towards evening. Dr. Stone ordered him a little quinine, after which he improved rapidly. The wound being nearly healed, and wishing to return home, he was discharged on the evening of the 24th February. A. S. F.

The above case is interesting, as there have been but few cases of wound of the gluteal artery recorded. Malgaigne states in his *Operative Surgery*, that it has been tied only four times. A case is related by one of the Bells, and one by Carmichael, of Dublin, (I think,) in both of which, the artery was tied by laying the parts freely open, as in the above case.

This is the third case that has come under my care. The first case was brought into the Charity hospital in 1835, con-

siderably exhausted by the loss of blood, from a wound of this artery; it was treated by compression. The wound healed, but about two weeks after, a small tumor was discovered in the region of the gluteal artery, which, upon auscultation, gave the usual aneurisimal murmur. The tumor seemed dense, as if considerable lymph had been thrown out and organized for its protection, and pulsation was only observed when its walls were compressed. This patient remained in the hospital about six weeks, and as the tumor did not increase, he was discharged; being warned of his condition, and advised to return if the swelling should increase; but I heard no more of him. The second case was admitted into the hospital in 1853, completely exhausted from the loss of blood. The wound was made six days previous to my visit to him, and he had suffered repeated bleedings. At the time I first saw him, he appeared perfectly bloodless, and nearly pulseless, having just had a hemorrhage, and it was thought that he could not bear the operation. Stimulants were administered, and in about an hour, the pulse became steady; and as the operation offered the only possible chance for life, he was placed upon the operating table, and the artery tied. The operation was made by making an incision from near the posterior superior spine of the ischium, to the upper part of the trochanter major, (which, from the distention of the parts by the coagulum beneath the muscle, was near a foot in length,) the coagulum was scooped out, and the finger placed upon the artery just where it emerges from the pelvis. In the upper part of the ischiatic notch, it was found that the artery was cut very near to the finger, and it was with great difficulty that a ligature was placed upon it; this was finally done, and the patient was carefully stimulated and nourished; but in spite of the greatest care, gangrene took place in the wound in consequence of the great loss of blood, and he died on the fourth day after the operation.

The surgery of the arteries, is generally considered complete, and it may be true in general terms; but it is certain, that wounds of arteries are frequently occurring, for which no precedent is recorded, and in which differences of opinion will exist, as in the case detailed by Mr. Fox. By most surgeons, it is considered sufficient to tie the artery on the proximal side of the wound; but Mr. Guthrie insists that it is important to tie the artery on both sides of the wound, at least when it occurs in the arteries of the extremities, as the free anastomosis he asserts, renders hæmorrhage very certain from the distal extremity. I have tied most of the large arteries for wounds, and in most cases have applied a simple ligature

at a convenient place on the proximal side of the wound, and have never been troubled with hæmorrhage from the distal orifice, except in one case. This was in a wound of the planter arch, in a case that was admitted into the hospital, sixteen days after it was received. The patient, a little boy of ten years, was completely exhausted from repeated hæmorrhages, and I tied the two tibial arteries, the anterior one on the dorsum of the foot, and the posterior one behind the inner maleolus. Three days after he bled again, but not very freely, and it was thought a little pressure would command it; but the next day it recurred with more violence, and the patient was completely exhausted, and evidently could not survive any further loss of blood. The foot was swollen and painful, and it seemed impossible to secure the artery in the sole of the foot, without destroying the organ, and I determined upon tying the femoral artery, which was done without the use of chloroform as the patient lay in his bed, for he was so weak, that I feared to disturb him; this secured the bleeding, and the little patient recovered perfectly.

But notwithstanding the confidence which my experience gives me in the safety of tying the artery at a convenient place on the proximal side of the wound, I would advise, in cases of false aneurism, when there is considerable extravasation of blood, to lay the sac open freely, and tie the vessel at the wound whenever it can be done without cutting through important parts. The impression is, that a large sac or cavity containing blood, laid open and exposed to the air, will take on ill-conditioned inflammation. This is generally true, where the extravasation is from a contusion, but there is great dissimilarity in the cases. In the former case, the blood is isolated, and can be scooped out clean, and the cavity heals kindly; but in the latter case, the blood mingles and clings to the contused parts, and cannot be sundered, and when exposed to the air decomposes and becomes a poison. Another fear that deters from opening the tumor is, that the artery may not be readily found, and the patient suffer from loss of blood. When the artery can be commanded by pressure on the proximal side, there can be no objection, and the bleeding mouth of the wounded vessel is readily discovered. The flesh is pushed away by the pressure of the extravasated blood and leaves the mouth of the vessel isolated, compared with its position in a fresh open wound. The advantage of this method of operating is, that we get rid of the mass of blood, which will generally have to be discharged sooner or later by a separate opening, when the quantity is large, and

we make the operation more certain, for the sac may be fed when the anastomosis is free.

In the case related by Mr. Fox, it was suggested to me that it would be best to tie the internal iliac, as the little patient was too much exhausted to bear any more loss of blood, and the uncertainty of finding the artery at once would render the operation dangerous. But from my experience, I felt confident of being able to command the bleeding, though I expected great difficulty in tying it, from its great depth. It would have been much easier to have tied the internal iliac, but the hip must have been laid open, for the pressure of the immense clot was causing great suffering, and the patient could not have rallied from the two wounds, to say nothing of the danger of secondary hæmorrhage. False aneurisms are not always readily detected. The bleeding orifice will occasionally be blocked up with a clot, and no thrill or pulsation can be discovered, and this may occur repeatedly.

A stout, athletic young man called on me at the Charity hospital, in 1837, for a lame shoulder. He stated that he fell, two days previous, from a high bank on the river, and forcibly dislocated his shoulder, which some men on the boat on which he was employed succeeded in reducing immediately after. The arm continued very lame and painful, and he called on me to see if it was in place. I found it in place, but much swollen. He returned the next day, when I found the swelling much increased, and a sense of semi-fluctuation was observed in the axilla, such as is peculiar to coagulated blood. I carefully examined and auscultated, but could make out nothing. He was admitted an indoor patient, and carefully watched, for I was sure that a blood vessel had been ruptured. I examined him several times a day, but it seemed singular that the tumor increased at night and remained stationary during the day, and sometimes it seemed to diminish. The pulse at the wrist was nearly or quite as good as in the other arm, but the tumor continued to increase until the skin appeared ready to give way, when I punctured it, (so that I might be present when it gave way,) and forced out some coagulated blood, but no fresh hæmorrhage took place, and I placed a trusty man by his side, with proper instructions if it should bleed. I returned in an hour or so, just as the clot gave way, and a jet of blood took place. It was red arterial blood, and flowed with a jet. There was now no mystery; the axillary was wounded, and I resolved on tying the subclavian above the clavicle. This was done with great difficulty, for the shoulder and clavicle were forced up by the great

mass of coagulated blood in the axilla. I succeeded, however, in getting down to the artery, but could not see it; but having an aneurismal needle, with a flexible silver point, into which the needle screwed, I shaped the point into something like a cork screw, which I was able to carry under the artery, and seizing the point with a pair of forceps, the handle was unscrewed and the point was drawn through, and the artery tied. The opening in the axilla was enlarged and a portion of the coagulated blood discharged so as to relieve the pressure, and the patient did well for fifty or sixty hours when he was seized with pneumonia (which was prevalent at the time) and died in the beginning of the fifth day. Dissection showed that the subscapular artery had been torn off smooth with the axillary trunk, and there were a number of clots in the sac which had evidently formed over the orifice from time to time as the force of the circulation became weakened or the sac distended, so as to resist the flow of blood, and cast off when the parts had become relaxed by yielding to the pressure; and hence it was that the real nature of the injury escaped detection, although suspected, and frequently looked for. It is worthy of remark that the arm of the affected side maintained its temperature nearly as high as the other, and the parts were evidently sufficiently nourished although all direct circulation was cut off, and by the loss of the subscapular artery the circulation from the suprascapular was cut off. This shows that parts may be nourished by permeation, or at least blood may get to parts by unknown channels. It is very certain that if the nature of this injury had been discovered early, and the artery tied before any considerable amount of blood had been extravasated, and the patient exhausted, he would have had a fair chance for recovery.

Another case (which was referred to in a previous article, to illustrate the method of compression,) was brought to my infirmary. A large semi-fluctuating tumor was found upon the left side of his neck, occupying nearly the whole space from the mastoid process to the clavicle; it evidently contained coagulated blood. His history was, that about five months previous he was stabbed with a narrow knife in the neck, and lost a large amount of blood. The hæmorrhage was arrested and the wound healed; but a tumor formed, which had gradually increased, until he came under my care, when it was very painful and appeared as if the integuments would soon give way. I had no doubt but it was a bloody tumor, but a careful examination showed that the carotid artery was not involved; there was no pulsation, and auscultation showed no sign. Careful examinations were made

several times, and as the wound of the vertebral artery did not occur to me, I conclude that the tumor was formed and fed from one of the cervical arteries, and determined to lay the tumor open, scoop out the blood, and tie or compress the vessel. An incision was made, and as soon as the pressure was relieved by a discharge of some of the coagulum, the blood gushed in torrents. The wound was rapidly enlarged, the blood scooped out, and the finger thrust to the bottom of the sac, and between two of the transverse processes of the vertebræ, and the bleeding controlled. The end of a long strip of lint was passed down with a blunt probe to the bleeding point, and carefully pressed down, and folded backwards and forwards until a cone was formed, filling the wound with its base at the surface of the wound, and the apex resting on the mouth of the wounded artery. This completely controlled the bleeding, and the compress was left with very little pressure to be pushed out by the granulations. This case recovered perfectly. I do not think, with the experience I then possessed, that if I had discovered a strong pulsation, and a loud murmur, that I would have ventured to lay it open as I did, and the patient no doubt would have died of hæmorrhage when the sac gave way. We may be deceived in the same manner in true aneurisms, the pulsation and murmur may be arrested from time to time by the formation of clots. So we should be careful in forming a diagnosis where there is any suspicion of aneurism.

But to return to the treatment of false aneurism, I have tied the brachial artery twice for aneurism at the bend of the arm produced by puncturing the artery in bleeding, and although the tumor was not deep in either case, it was slow in absorbing; in fact never entirely disappeared, (at least so long as under my observation) and the motion of the arm was much impaired. I am satisfied that the cure would be much more certain and perfect if the sac were laid open, the artery tied and the clot discharged. I have tied the brachial artery for wounds of the ulnar artery under the bellies of the flexor muscles of the forearm and have been obliged generally to enlarge the wound to discharge the extravasated blood and the same in wounds of the femoral artery. The truth is, physicians are not usually prompt enough in the treatment of wounded arteries. If an artery requires tying there should be no delay. When there is no immediate danger from hæmorrhage we may be justified in trying compression, but if it fails and bleeding occurs after a few days, whether it flows externally or is confined in the tissues and forms an aneurism, the artery should be tied at once, for the case is sure to go

on from bad to worse, and the patient's chance of recovery daily diminished. If the sack can be laid open or the wounded artery exposed and tied at the wound without dividing important parts, it should always be done, but if not it should be tied at a convenient place on the proximal side of the wound, and subsequently the extravasated blood can be discharged, if necessary, either by enlarging the original wound or by a new opening, as may suit the case. I feel confident that I lost an arm many years ago by not discharging the blood extravasated under the muscles of the forearm. The ulnar artery was cut by a narrow chisel, thrust through the bellies of the flexor muscles of the forearm; it had been treated for a week by compression, and the patient had lost considerable blood by repeated bleeding, and there was a large amount of blood extravasated into the intermuscular spaces; I tied the brachial artery, gangrene occurred, and I had to amputate. On examination of the limb I felt satisfied that the gangrene was from the compression of the extravasated blood interrupting the collateral circulation.

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### **An Account of the Cases of Dislocation of the Femur at the Hip Joint.**

Treated by Manipulation alone, after the plan proposed by W. W. REID, M. D. of Rochester, which have occurred in the New York Hospital during the past two years.

BY THOMAS M. MARKOE, M. D.

In the "Transactions of the Medical Society of the State of New York, during its annual session held at Albany, February 3d, 1852," is published a paper by William W. Reid, M. D. of Rochester, N. Y., on "Dislocation of the femur on the dorsum ilii, reducible without pullies or any other mechanical power," in which it is the object of the writer to show that this displacement can be remedied "by flexing the leg on the thigh, carrying the thigh over the sound one, upward over the pelvis, as high as the umbilicus, and then by abducting and rotating it."

The fact that luxations of the hip joint might be reduced by manipulations, not requiring forcible extension by pullies or other mechanical contrivance, seems to have presented itself to the mind of several writers both of ancient and of modern times. The idea would appear sometimes to have been suggested by accident, and sometimes to have been the result of

reasoning on the mechanism of the joint and its displacements. Such a suggestive accidental reduction occurred in the hands of Dr. Physick, and is related in Dorsey's Surgery. A patient was the subject "of dislocation of the femur directly backwards, and after very powerful efforts had been made to effect the reduction by extension, Prof. Physick, conjecturing that the head might be confined in a slit in the capsular ligament, discontinued the extending force entirely, and then, with no more force than that of his own hands, abducted the thigh, when the bone instantly slipped into its place."

A similar occurrence took place in our hospital, about the time of the introduction of the use of chloroform, in a patient with dislocated hip, under the care of Dr. Jno. C. Cheesman. While the preparations for applying mechanical force were being made, Dr. C. made some preliminary movements of the joint, while the patient was fully under the influence of chloroform, and, unexpectedly, the head of the bone slipped into its proper place. Dr. Nathan Smith, professor of surgery in Yale college, succeeded in reducing a luxated femur, by manipulating, with the thigh and leg used as a lever, after the usual plan had failed. It would seem from the report of this case, which, however, is made from memory by his son, Dr. Nathan R. Smith, that it was a deliberate and prearranged plan of procedure, though the considerations which led to its adoption are not mentioned in the record.

Chelius, in his work on surgery, gives an outline of the views of four writers, who have proposed to effect the reduction of the dislocated hip by the hands alone of the surgeon and his assistants, and without the aid of pulleys, or, indeed, of any forcible extension. Three of these gentlemen, Wattman, Kluge and Rust, have described methods not very different from each other, which essentially consist of moderate extension with the hand, combined with movements of rotation of the axis of the limb, adduction, flexion, etc., but with the addition of force applied by a band passed around the upper part of the limb, which is committed to an assistant, and, in the different forms of dislocation, is so applied as to lift the head of the bone from its unnatural resting place, while the other movements made with the shaft of the limb give an opportunity to the muscles, stretched by the luxation, to draw the head back into the acetabulum. Another surgeon, referred to by Chelius, Colombat, speaks of a method which he has always employed with success, in which the patient stands at a table leaning forward with his chest upon it, and the surgeon, standing behind, bends the knee with one hand, and makes the various movements of the hip joint, while,

with the other hand on the ham, he makes gradual extension by pulling downwards. By this manœuvre, he states that he dislodges the head of the bone, and without any force accomplishes its reduction. In Casper's *Wochenschrift* for Nov. 1849, there is an account given by Dr. Fischer of Cologne, of his mode of reducing luxations of the hip, which consists in flexing the femur on the trunk, and then making rotation of the limb, conjoined with adduction, or abduction, as the head of the bone is on one side or the other of the acetabulum. In the *N. Y. Journal of Medicine* for March 1852, a Dr. Mayr is spoken of as having made use of this procedure of Dr. Fischer, without being aware of Dr. F.'s published statement.

Dr. Reid, in his paper, gives us an account of his observations on this subject, which appear to have been made entirely independent of any knowledge of the previous opinions of other writers. He speaks of his early impressions, on seeing the management of some cases of dislocated hip after the usual method, and gives his reasonings and reflections and experiments, on the muscular actions and the mechanical forces which were concerned, or might be employed, in the production and in the reduction of these displacements. He describes the steps by which he was led to the adoption of his mode of operation, and, what is most to the purpose, he gives five cases in which the operative procedure, to which he was led by reasoning, was successfully employed. It is no part of the object of this communication to criticise or to eulogize Dr. Reid's paper; but, having tested to some extent the value of the proposed plan, we feel that we owe to the profession a full statement of what appears to us to be a most valuable contribution to the art of healing. It is still less our intention to mete out the degree of praise which is due to Dr. Reid as the originator of the idea upon which the practice is founded. It would seem, from the little historical sketch given above, that the idea had occurred to others before it occurred to him, and that, therefore, the barren honor of being the first suggester of the idea, that luxations of the hip might be reduced by manipulations alone, does not belong to him. All who read his paper, however, will acknowledge, that to him belongs the higher honor, of having caused the idea to assume the shape and value of a fact, and out of the bare suggestion to have, by patient, ingenious, and long continued investigation and experiment, deduced an available, and, as we think, an exceedingly valuable addition to the resources of practical surgery.

CASE I.—The first opportunity which presented itself for the trial of the new method, was in the case of an Irish la-

borer, who was brought into the New York hospital, Novem'r 30th, 1852, with a luxation of the right thigh. He had been struck, a short time before admission, by the cowcatcher of a passing railway train, and thrown some distance, and in his fall, probably, the accident was produced. The symptoms were those of the dislocation on the dorsum ilii, the head lying rather lower down and nearer the ischiatic notch than usual. The thigh was shortened about two inches, tended across the other, with the ball of the great toe of the injured limb touching the instep of the other foot, fixed in its position, and the head of the femur was felt in the position above described when the thigh was rotated on its axis. In addition to this injury, he had received a compound fracture of the left leg, three inches above the ankle, together with a good deal of bruising of other parts of his body. The patient was etherized to the extent of complete relaxation, and Jarvis' adjuster was applied. It broke on the first trial of extension, and was laid aside. This mischance suggested the trial of Dr. Reid's plan, which was accordingly adopted. The operator, Dr. Buck, after bending the leg upon the thigh, gradually adducted the thigh, while at the same time it was being flexed upon the trunk. Carrying the limb thus bent at the knee, and strongly adducted, over the sound thigh, by a gradual sweep over the abdomen, and then slowly and steadily abducting the limb so as to carry the knee outwards, making at the same time a rocking motion by moving the leg backward and forward, had the effect of dislodging the head of the femur from its new position, and making it approach the acetabulum; but it did not enter the socket. From the position above indicated, the limb was now brought down slowly towards a straight position, still kept in a state of forced adduction. This last manœuvre seemed to have a very powerful influence in forcing the head towards the acetabulum, but the whole proceeding was completed without success. It was observed, however, that the head had been moved a little higher on the dorsum than it was before. The same manipulation was now again practiced more deliberately and more carefully than before, and as the limb was being brought down abducted, we had the satisfaction of seeing and hearing the reduction effected, by the head of the bone slipping into its socket. All deformity had disappeared, and the motions were free in all directions. The other injuries were properly attended to, and the recovery from the effects of the luxation was rapid and satisfactory. He finally recovered from his compound fracture also, and left the hospital with a good leg and a perfect hip.

CASE II.—An Irish laborer, aged 25, received an injury of his right hip, and a fracture of one of his clavicles, by being thrown from a railroad car, while it was in motion. He was received into the New York hospital, December 8th, 1852, under the care of Dr. Halsted. On examination, the injury to the hip proved to be a luxation of the femur upwards and backwards on to the dorsum ilii. The patient was placed immediately under the influence of ether, and the reduction was attempted by a procedure nearly the reverse of that above described, in case 1. The leg being flexed upon the thigh, the limb was flexed upon the trunk and carried up in a state of abduction, then across the abdomen, and being fully adducted, was, in that state, brought down to the straight position. The effect of this mode of operating, which is almost precisely that said to have been employed by Prof. Nathan Smith, was to throw the head of the bone forwards, under the anterior superior spine of the ilium, and it was quite evident that a very little more force in the same direction would have brought it upon the pubes. This plan was therefore abandoned, and Reid's manipulation was tried carefully and without the employment of much force. On the first trial it was successful, the bone being reduced with an audible snap, as the limb was being brought down in a state of abduction. The recovery was rapid and perfect, and he was discharged, cured, January 15, 1853.

CASE III.—Charles O. Merritt, a sailor, thirty-seven years old, of a stout, vigorous frame, was admitted to the hospital with a luxation of the femur, of twelve weeks' standing. Attempts had been made, by an excellent surgeon of this city, to reduce the bone, but without a satisfactory result. A very careful examination was given to the limb by all the surgeons of the hospital who were present, and all agreed that the head of the femur was thrown upon the dorsum of the ilium, in the usual situation; but some doubt existed whether there might not also be an injury of the acetabulum itself. The patient being fully etherized, Reid's manipulation was tried, and, on the first trial, failed, the head seeming to remain nearly in the position it occupied before the operation was commenced. Dr. Watson, under whose care the patient was, now made a second more careful effort, using more force in making all the movements, but being particularly careful to make forced abduction while bringing down the limb from extreme flexion to the straight position. As the limb was thus descending, slight rocking motions being at the same time employed, the reduction was suddenly accomplished, the head of the bone being felt, or heard by a great number of persons, to slip into

its socket. The limbs being laid side by side, all deformity had ceased, and all present were satisfied that the reduction was complete and perfect. The patient's knees were bandaged together in the usual manner, and he was placed in bed with rather more care than usual, but in less than an hour it seemed as if the joint had lost its natural appearance again in a slight degree, and the apparatus was tightened. By next morning, however, it was too evident that the original displacement had again occurred, and to its fullest extent. This had taken place in spite of the greatest quietude on the part of the patient, who was a very intelligent, tractable person, and fully aware of the importance of keeping the joint unmoved. The manipulations were again tried several times, but without effect. The head of the bone seemed to move about freely in all directions, but could not be brought into the acetabulum. The limb was put up in the straight apparatus which we usually employ for fractures of the thigh, and extension, by the adhesive straps, was kept up so as to keep the parts, as nearly as possible, in proper position. A good deal of stiffness and swelling of the joint followed, which, however, subsided, and he was allowed to go about on the 30th January. He finally gained about as much use of the joint as if there had been a fracture of the cervix femoris. I am informed by Dr. Buck that he has since gained a very excellent use of the limb.

CASE IV.—John Kelly, a laboring man, aged twenty-one years, was admitted May 22d, 1853, having been knocked down by a horse-car, by which a luxation of the left hip had occurred into the ischiatic foramen. The limb was shortened about one inch, toes turned inward, and the head of the bone felt in its new situation. The reduction was attempted by the mode described above, the man being fully relaxed by ether. The effect of the first attempt was to throw the head on to the obturator foramen, making the limb longer than the other, and producing the deformity characteristic of that dislocation. From this point, by a slight alteration of the movement, the head could be made to slip back to its original position. Between these two points it could be made to play backwards and forwards, but would not enter its socket. Dr. Post, in whose charge the patient was, then employed the usual mode of reduction, from the foramen ovale, viz: extension of the limb, combined with a lifting of the head of the bone over the edge of the acetabulum, by the help of a folded sheet passed round the upper part of the thigh. This proved successful, without resorting to the pulleys. In this case the cure was very slow, and he left the hospital with some de-

gree of pain and swelling about the joint. I learned that an abscess formed in or about the joint, which was opened, and when I saw him a year after, there was every appearance of seated morbus coxarius.

CASE V.—Michael Delany, a boy aged eight years, was admitted into the house June 29th, 1853, having received very severe injuries in falling from a ladder, at the height of the third story of a house to the ground. There was found to be a bad compound fracture of the right thigh, and simple fracture of the left. When laid upon a bed, and his clothes removed, the right thigh, which was the seat of compound fracture, was found to be in an extraordinary position. It lay obliquely across the abdomen of the boy, with the leg and foot lying up by the axilla of the left side. On examination, it was discovered that this singular position was rendered possible by the fact that the head of the femur was dislocated backwards and upwards, on the *dorsum ilii*. The house surgeon, to whose care the case fell on admission, took the injured limb in his hands and very carefully carried it over the abdomen to the right side, and then abducted it and brought it down towards the straight position, thereby completing the steps of Reid's manipulation, which accident had already commenced. In doing this, the head of the bone slipped into its place, and the hip gave no further trouble. The fractures of both thighs went on favorably towards a cure, and he was discharged well, August 23, 1853.

CASE VI.—John Gallagher, twenty-eight years old, a stout Irish laborer, was brought into the hospital about half an hour after he had fallen from his cart while intoxicated. He was found to have a dislocation of the left femur upon the *dorsum ilii*, and was immediately sent to the operating theatre and placed fully under the influence of ether. I then proceeded to employ the manipulation above described, but as we were completing it by bringing down the limb strongly abducted, it became evident that the head of the femur was about to slip below the acetabulum into the foramen ovale, as had occurred in Dr. Post's case, No. 4. The movement was therefore reversed and again more carefully tried, with the same result. On the third trial, with the view of avoiding this tendency of the head to be forced below the acetabulum, I brought down the limb in a state of very slight instead of very strong abduction, making the movement very deliberately, and accompanying it with the usual rocking motions of the limb on its axis. This plan was perfectly successful, and the bone slipped easily into its place, and the cure was rapid and perfect. All the movements in this case were made with

the greatest facility, and without the necessity of employing any more force than the weight of the limb required.

After the reduction in this case, I made a dissection of the hip joint in a recent subject. I had previously made several dissections with reference to the action of the different muscles and their condition after luxation. In this instance, however, I removed all the muscles, leaving the capsular ligament only, and then endeavored to dislocate the head of the bone. I first tried abduction, and carried the limb so forcibly over the abdomen that the knee touched the anterior surface of the thorax, but without producing luxation. On making more violent efforts in the same direction, the cervix fractured or rather cracked across within the capsule, and soon after the ligament itself tore across at its superior and posterior part, just opposite the point of yielding of the cervix. The laceration was directly across the ligament, and occupied about one-half of its circumference. As soon as this took place, the dislocation was easily effected. The neck of the femur and the trochanteric portion of it were now seen to be kept in their place by the untorn portion of the capsular ligament, which acted as a sort of fulcrum, upon which, by using the limb as the long arm, we could make the head, as the short arm, move about in any direction upon the surface of the dorsum of ilium. On making the manipulations for its reduction, the head was observed to pass behind the acetabulum until it reached its lower margin, and if the thigh was brought down slightly abducted, it slipped easily over this least elevated part of the margin into its socket. If however, it was brought down very strongly abducted, the head, instead of passing into, went below the acetabulum, and passed on to the foramen ovale, as it was about to do in Gallagher's case, No. 6, and as it did repeatedly do in Kelly's case, No. 4. Still further, we observed that after we had reduced the bone it slipped very easily out of place again, and this was explained by finding that in the reduction, the head had not gone back through the rent in the capsular ligament, but, remaining outside, had pressed the capsule before it into the acetabulum. This, of course, prevented the complete reception of the head of the bone into the socket, and permitted it to slip out again with the greatest facility. This entanglement of the head in a button hole opening of the capsular ligament is noticed by many surgeons as an obstacle to complete reduction by the old plan with the pullies, and I do not perceive that the new method offers any advantages in this particular. Might not this have been the condition of things in Merritt's hip, case No. 3?

CASE VII.—Francis Cotbunger, an Irish turner, was admitted to the N. Y. hospital, December 12th, 1853, with a dislocation of the right hip. The accident had occurred about four weeks previously, and had been treated in the country, as a sprain, by leeches, etc. The limb was lengthened, the toes everted, and the whole limb stood off from the body abducted, and slightly flexed, symptoms which clearly showed that the head of the bone was upon the foramen ovale. The patient being fully brought under the influence of ether, a manipulation the reverse of Reid's was employed by Dr. Halstead. The leg being bent upon the thigh, the thigh was gradually flexed upon the trunk until the knee touched the thorax. The limb was then brought down, forcibly abducted, into the straight position. By this the head of the femur was moved from the foramen ovale on to the dorsum ilii. Being in this situation, Reid's method was adopted, with the effect, however, of bringing back the head to its original position on the foramen ovale. By a repetition of the first manoeuvre, it was again thrown on the dorsum, and from there, by Reid's plan, again thrown back upon the foramen. After repeated attempts, the bone was finally reduced by the pullies from the dorsum in the usual way, this being the only instance in which the pullies or Jarvis' adjuster have been used, since our attention has been called to the new plan. It will be noticed, however, that the limb was every time brought down in a state of forced abduction; the moderate abduction found successful in Gallagher's case, No. 6, was not tried. A good deal of swelling and pain in the joint followed these various operations. He was up and about, however, by the 5th January, and on the 13th he was discharged, cured.

CASE VIII.—Hugh Doyle, a sailor, 22 years old, was admitted to the hospital, April 22d, 1854, with a dislocation of the left thigh upon the foramen ovale. The limb was in a position of abduction, rotated outwards, with the foot resting on its outer edge. The muscles arising from the pubes and ramus of the ischium were very tense, adduction was impossible, and the prominence of the trochanter was gone. From this deformity, the position of the head, with regard to the acetabulum, was clear. He was also suffering from other severe injuries, which had been produced by the fall, in which the hip was luxated. He was put fully under the influence of ether, and the reduction was first attempted in the usual way, by Dr. Buck, by direct extension of the limb in the direction of its axis, while at the same time the upper part of the thigh was lifted forcibly outwards by means of a sheet folded round it. This had not the desired effect, and would have required the

pullies to make it effectual. Another manipulation was then tried. The leg was flexed upon the thigh, and the thigh upon the trunk. The foot was then pressed forcibly outwards, thus rotating the thigh inwards on its axis, and giving the head of the bone an inclination outwards towards the ischiatic notch. The pelvis at the same time was held firm by assistants. This was repeated twice, each time with the effect of causing the head to move considerably from its resting place, but without entering the socket or going over to the notch. On the third time of making the manipulation, the thigh was brought down from entire flexion to a little below a right angle, and while in this position the foot was again forced outward as before. This plan proved successful, and the head of the bone slipped into its proper place in the acetabulum. This was accomplished without any considerable force or difficulty. The cure went on favorably, and without unusual symptoms.

CASE IX.—Fritz Frieze, aged 38, a German sugar refiner, came into the hospital, May 23, 1854, with a luxation of the left thigh, which had occurred fourteen days before from a fall. The surgeon who first saw him pronounced it a mere contusion, and had allowed him to walk about, which he was able to do without much pain, though, of course, with a very great halt in his gait, and with great labor in the movements of the injured hip. As he stood erect, the left thigh inclined outwards and forwards from its proper direction, the toe of the injured limb touching the floor about ten inches from the other foot. The limb was an inch longer than its fellow, and the adductor muscles were tense. Adduction was impossible. The trochanter was fallen in towards the pelvis and thrown backwards and downwards. On making rotation, the head of the bone could be indistinctly felt moving on the foramen ovale. After having the patient fully relaxed by ether, I made some free movements of the limb in all directions, with a view of breaking down any adhesions which might exist. I then took hold of the ankle of the injured limb with the right hand, while I supported the thigh with the left; I flexed the knee to a right angle, and moving the thigh a little forwards, to relax the tense adductor, I forced the foot inwards, making, at the same time, a rocking motion of the whole limb on the pelvis. My idea was, by rotating the thigh outwards, to throw up the head of the bone towards the acetabulum, from which it could not be distant more than an inch. This manœuvre was not successful, though carefully and repeatedly tried. We then tried the plan adopted by Dr. Buck, in Hugh Doyle's case, No. 8, with the effect of throwing the head upon the ischiatic notch. By reversing the movement, the head was

easily thrown back to its previous position on the foramen, and the first manipulation was again tried, combined with a movement of strong adduction in a direction which carried the knee behind the other one. This, accompanied with the rocking motion, which we have found useful in all these replacements, accomplished the reduction on the first trial, and without the slightest violence or excess of force. The head slipped in with an audible snap, and the limb assumed its natural shape and position. The cure was rapid and perfect.

The two last cases were experimental, as we had no knowledge of any recorded precedent which gave us any assistance in their management. We were led to adopt the modes of manipulation, simply from reasoning on the effect which the movements of the thigh would produce on the position of the head of the femur. An attentive examination of the skeleton, with the head of the femur placed on the foramen ovale in the position it assumes when luxated, will show that, while the head lies upon the foramen, the neck lies along the side of the pelvis in such a manner as to bring the trochanter about opposite to, and a little below, the acetabulum. If, now, we hold the trochanter fixed with one hand, and make the two movements described in cases 8 and 9, it will be observed that the head can be brought into place by both of them; but, at the same time, it will be observed that, when the trial is made by rotating the thigh inwards, thereby causing the head to move outwards, the head, in order to reach the socket, has to pass through a sweep of  $\frac{3}{4}$  of a circle, and then crosses the lip of the acetabulum at a point where it is very prominent and very difficult to surmount. If, on the contrary, the rotation of the thigh is made outwards, so as to throw the head inwards, it has only a space of about an inch to pass through in order to slip into place, and the portion of the brim over which it passes is much less elevated and prominent. The movement of adduction in a direction a little backwards, as employed in case 9, has evidently the effect to lift the head over the edge of the acetabulum when the rotation has brought it to that point. It will also be noticed that in the outward sweep of the head, it has, in order to get up to the acetabulum, to pass by the ischiatic notch, into which it is exceedingly prone to slip, as actually occurred in case 9, and also in case 4. For these reasons, I am disposed to consider the manipulation employed in case 9 to be the correct and most effectual one in this form of luxation, and that though in a recent and favorable case the outward movement of the head might succeed, yet that in a difficult or long standing case it would fail entirely, or be attended, if successful, with a great degree of vio-

lence and laceration. This is a point, however, which can only be settled by more ample experience and careful experiment. From the comparative rarity of this form of luxation, this experience can only be slowly obtained, and we should feel greatly indebted to any gentleman who may have an opportunity of managing such a case by manipulation, if he would transmit to us the results of his experience.

CASE X.—Dr. Dewitt C. Peters, late house surgeon of the N. Y. hospital, now of the U. S. army, writes from Pawnee Fork river, Kansas territory, under date of Sept. 24, 1854, "I have had one case of dislocation of the head of the femur into the ischiatic notch, which I reduced immediately after it occurred, by putting the man under the influence of ether and employing the method of Dr. Reid." The man had been thrown violently by an unruly mule he was attempting to harness.

The following letter, from Dr. W. Parker, professor of surgery in the university of the state of New York, adds two more valuable cases to our list.

NEW YORK, Nov. 10, 1854.

DEAR SIR—In compliance with your request, I send you an account of two cases of luxation at the hip, which I reduced after the plan proposed by Dr. Reid, of Rochester, N. Y.

CASE XI.—July 11, 1853. I was called in the evening, to Mr. P—— C——, a contractor, hale, muscular, and forty years old. I found him lying on the carpet, complaining of pain. He was thrown from his carriage, by the running away of his horse. On examination, I found the left limb an inch and a half shorter than the other, and the foot turned inward. The head of the femur was in the sacroischiatic notch.

I put him *fully* under the influence of chloroform, and proceeded to reduce the thigh. In my first attempt, I carried the head of the bone into the foramen thyroideum. By a slight movement and without force, the head of the bone passed up to the notch. I at once made the second trial, and carried the bone into place with the utmost ease. The patient was soon at his business.

CASE XII.—November 1, 1854. Mrs. K., aged forty-four, fell some eighteen feet, injured the brain and luxated the left thigh. I saw her at two P. M. Advised to dress the head, get up reaction, and I would be back in a few hours to reduce the limb. This was a luxation upon the dorsum. She was strong and muscular.

I found her in the evening warm and sensible. I applied chloroform and proceeded to reduce. I accomplished it after the plan of Dr. Reid, without any violent effort and in a most satisfactory manner. I am prepared to say, the profession are under great obligations to Dr. Reid for the plan of treatment which he has suggested and demonstrated in the reduction of luxations at the hip-joint. With the aid of *an* anæsthetic the plan is perfect. W. P.

CASE XIII.—Samuel Gordon, aged thirty-seven, Ireland, laborer, was brought to the N. Y. hospital, November 22, 1854, with a luxation of the right hip, and a fracture of the right leg. The accident had occurred immediately before admission, from the falling of the wall of the gas-house. The head of the bone was found on the dorsum ilii, rather low down towards the ischiatic notch.

Nov. 24.—The leg having been dressed firmly with pasteboard splints, so that it might not receive injury during the reduction of the hip, the patient was fully etherized, and Reid's plan of reduction was tried by Dr. Watson, twice or thrice without effect. This plan was abandoned, and the pullies were faithfully and for a long time employed. The head descended, but would not pass into its socket. Thinking that Jarvis' adjuster would give more control over the movements necessary in replacing the bone, it was applied, and with it the head of the femur was brought down so that it seemed ready to slip in, but on cutting the cord it was found unreduced. It was thoroughly tried until the steel shaft bent, but without success. Under these discouraging circumstances, the pullies were again about to be applied, when it was thought best to give Reid's plan one more trial. The manipulation was performed twice, without success. The third time it was done more deliberately and more carefully, and when the head of the bone was brought to the lower edge of the acetabulum, it was retained there for a time and the rocking motion performed in all directions, and when all seemed loose and free, the abduction was increased, without any jerk or sudden motion, and the limb brought down thus strongly abducted towards the straight position; as this was done, the head of the bone slipped into place with an audible snap.

From the small number of cases here presented, even with the addition of those recorded in Dr. Reid's paper, I do not consider that we can obtain data sufficient for the final appreciation of the new plan of reducing luxations of the hip-joint. Still, they seem to be sufficient to show us that the plan may be safely, easily and successfully applied to a certain num-

ber, and probably to a very great proportion of all the cases which occur. The cases which are related embrace every instance of dislocation of the femur which has presented itself in the hospital during the last two years, and a reduction was always effected without the aid of pullies, except in the one case of Dr. Halsted, No. 7, and here a modification of the manipulation, which had previously proved successful, was not tried. In Dr. Post's case, No. 4, the reduction was finally effected from the foramen ovale by the usual mode, though without the pullies, but it was brought, by the manipulation employed, to this point from the ischiatic notch, from which it would surely have required the pullies to displace it on the old plan. It is to be observed, too, that our experience has been progressive, and while, at the time case No. 4 occurred, we did not know how to reduce the bone from the foramen ovale by manipulation alone, that we have since learned the true method of doing it, if our experience, in cases 8 and 9 can be relied on. Though we have failed, then, in reducing, by the new plan, two cases out of the thirteen, yet I think that the record shows good reason for believing that all might have been so reduced, if we had known at the time as much as subsequent cases have taught us. The applicability of the plan to cases of long standing, is well shown in Merritt's case, No. 3, where twelve weeks had elapsed, from the time of the accident, and in which, though not permanent, the reduction was effected with comparative facility.

With regard to the rationale of the process, most of those who have written on this matter are in the main points agreed. The head of a dislocated femur is retained in its new position by a mechanism which does not exist in any other joint, and which is produced by the fact of the muscles not being inserted into the head, but into the trochanter, nearly three inches from the head, and that from this point of principal muscular insertion the neck goes off at a large angle from the axis of the shaft. From this, it happens that when the head of the femur is thrown out of its socket, the trochanter no longer stands out more prominent than before, but being held firmly by the muscles which are inserted into its base, it is prevented from rising any more than enough to let the head out of the acetabulum, while the head and neck, slipping to the one side or the other, are found lying in such a manner that the side of the head, neck and trochanter are in contact with some part of the outer surface of the pelvis, varying, of course, in the different forms of luxation. This being borne in mind, it will be clear that any attempt at reduction, which merely brings the head of the bone to the acetabulum, will not succeed in

making it enter that cavity, because of the lying-down position of the neck and trochanter against the side of the pelvis. We need, therefore, not only to bring the head over the socket, but at the same time to raise up the trochanter and neck so as to allow the head to enter. Now, in the ordinary methods of reduction, this raising up of the trochanter, so as to put the neck in the proper direction for the head to enter its socket, is done first, by the action of the pulleys, and the approximation of the head to the socket is done second, by the continuation of the extension. This raising of the trochanter is, of course, opposed strongly by the muscles inserted into its base, causing the head to be pressed more firmly against the pelvis, and increasing the friction, and thereby causing, by far, the greater part of the difficulty in bringing down the head to the level of the acetabulum. It is in this, principally, and I am myself disposed to say only, that any active muscular contraction opposes the reduction of a dislocation of the hip-joint. True, the large muscles around the joint are thrown into action as soon as extension is made; but this is an action excited by the extension, and, that it is a very feeble opposing force, is evidenced by the facility with which these muscles give way to the force of a single unaided arm, when a fracture of the neck of the femur is concerned, in which, of course, none of the friction alluded to can occur. This comparative action of the muscles, in fracture and in dislocation, is very strongly and appropriately insisted upon by Dr. Reid.

The process by manipulation avoids this main difficulty, and, as it were, eludes the opposition of the muscles. The trochanter, being fixed by the insertion into its base of the pyriformis, the two obturators, the gemelli, and the upper part of the quadratus, acts as a fixed point or fulcrum, upon which, by moving the limb, the head of the bone can be made to describe a circle around the fulcrum. When we remember that this fulcrum is not, strictly speaking, a fixed point, but has a certain degree of motion of its own, we can easily see how, by means of this movable fulcrum, the head of the bone can be placed, by varying the motions of the limb, on almost any point within two inches around the acetabulum, and, of course, over the acetabulum itself. If this manipulation is made in such a way as not to raise the trochanter from lying against the pelvis, then, when the head comes over the acetabulum, a slight rotation, such as is given by the rocking motion employed, will sufficiently raise the trochanter to let the head slip in without provoking to opposition the trochanteric muscles, and if the movements be made in such a direction as to relax the stretched muscles, the whole may be accomplished

without calling forth the slightest muscular opposition from the beginning to the end of the procedure. This principle, in its application to the different forms of dislocation, presents some variations. In the dislocation on the dorsum, and on the ischiatic notch, for their mechanism is for our purpose identical, the principle has its best illustration; and, if any one will take the skeleton or the dead subject, and go through the process, he will perceive that, by abduction, the tense rotators are relaxed, and that, by flexion of the thigh upon the trunk, the head is caused to pass down behind and below the acetabulum, and then, by carrying the knee out so as to abduct the limb, that the head comes toward the lower portion of the acetabulum where its margin is least prominent. At this point, I wish it to be observed, that our mode of procedure varies a little from Dr. Reid's. He recommends, when the head is brought by abduction close to the lower edge of the acetabulum, that, by the rocking movement already described, it be caused to slip in. This is well, and will probably answer in many cases, but it failed us so completely from the first, that we were led to add the bringing down of the thigh to the straight position in a state of abduction, still keeping up the rocking motion, and it has been uniformly in the act of thus bringing down the limb, that the reduction has been accomplished. On looking at the parts in the dead subject, it will be seen that this movement of the limb, when the head has reached the lower margin of the acetabulum, tends directly to roll the head upwards over the edge and into the socket. The mechanism of the reduction from the foramen ovale has already been alluded to. I do not know of any case of reduction from the pubes.

If the proposed plan should prove, on further trial, to be as successful and as free from danger as it thus far has been, one most valuable feature of it, as a surgical resource, will be its availability. Wherever a surgeon, with his bottle of ether, can go, there the dislocated hip can be reduced, without instruments, without appliances, without assistants. I well remember finding myself, in the year 1848, in a country village in Vermont, in consultation on a case of dislocated hip of some week's standing, in which it was difficult for us to persuade the patient's friends that there was anything more than a sprain of the joint. It was late on a cold autumn day, and we were about twenty miles from any place where pullies could be obtained; but, nevertheless, we made such extempore arrangements as we best could, and by the help of an old tackle-block and some bed cord, with counter-extending bands of hanks of homespun yarn, we proceeded to attempt the reduc-

tion. If we had been heartily seconded by the friends and family, we could, I have no doubt, finally have succeeded, even with our clumsy apparatus; but the doubts and hesitations on their minds, and their unwillingness to allow the patient, a stout, muscular young woman, to be so long and so repeatedly subjected to our unsatisfactory attempts, finally decided the case against us, and we were dismissed without thanks or fee, and the poor girl's hip has never been reduced to this day. I have often thought since, how different an aspect matters would have worn, if we could have brought the manipulation to bear upon the case, and how different a result might have been obtained for the unfortunate patient. No better illustration, however, could be given of the availability of this operation than that given in the letter of Dr. Peters, giving an account of case 10, in which he says, that the accident occurred in the heart of Kansas territory, five hundred miles from the nearest fort. If the poor man had depended upon pullies for the reduction of his dislocation, how much delay and suffering must he have undergone, from which he was saved by the simple fact that Dr. Peters was familiar, during his hospital course, with the management of these cases by manipulation, and was therefore able, on the spot, to effect with ease a reduction which every day's delay would have rendered more difficult.

Everything in our experience thus far seems to indicate that this method of reducing luxations is as safe, if not safer, so far as the integrity of the joint and its after usefulness is concerned, than the reduction by forcible extension with the pulleys. The method is not, however, without its dangers, and these mainly arise from the immense amount of force which can be exercised by acting on the long arm of so powerful a lever as the whole limb, while the short arm has at most a length of three inches. By the inconsiderate or misdirected action of this lever force, one of three accidents might be produced: either the muscles holding the trochanter, and thereby forming the fulcrum on which the power is applied, might be torn from their attachments; or, if they held fast, the tissues, round and among which the head passes in its movements, may be extensively lacerated or contused; or, lastly, it seems to me very possible that the neck of the bone might be broken by too violent abduction, forcing it against the side of the pelvis. Though happily these dangers are thus far only theoretical, yet the anatomy of the part shows that they are real, and each one of them might have most serious consequences. It would not be possible to lay down any specific rules whereby these dangers are to be avoided, except by insisting on

that almost universal law of surgical manipulation, that everything is to be done with gentle moderate force, and never with sudden violence. As far as my recollection serves me, and I myself assisted in almost every case reported, we never have accomplished anything by proceeding in a direction where great force was required to continue the movement, but have always succeeded by finding a direction in which the mere continuance of the movement, without force, has brought the head into the proper position. It will be noticed, by looking over the cases, that in many of them, before the head went into its socket, it slipped about on the outer surface of the pelvis, taking sometimes one and sometimes another of the four positions usually spoken of as the four forms of luxation of the hip. This in some instances happened several times, and in the two instances of failure, this change of position was all that could be accomplished. Now, it cannot be doubted that this extensive movement of the head of the bone must be attended with a corresponding amount of laceration and displacement of the tissues among which it passes, and although the mischief thus done may be confined to the areolar tissue in the muscular interspaces, still it is an injury which may add to the dangers of after inflammation, and is, if possible, to be avoided. I suppose this can only be done by defining more accurately the precise method of procedure to be adopted in each case, so that no experimental or ineffectual trials shall have to be made, but the operator shall be able at once to do exactly what is necessary to bring the head of the bone to the point desired.

The above account had been prepared for the press, with the exception of case 13, which has since occurred, when a case presented itself which offers some points so important in their bearing upon what has already been said, that I add the history here by itself, rather than incorporate it with the other cases.

CASE XIV.—Patrick Barry, aged 42, was admitted to the New York hospital, Oct. 23, 1854, with a dislocation of the left femur, which had occurred seven weeks previously, by a fall from a rail car while it was in motion. The symptoms were unequivocal, the limb being shortened  $1\frac{3}{4}$  inches, the ball of the great toe resting on the instep of the sound foot, and the head of the bone being distinctly felt upon the dorsum of the ilium. The patient was a man of good muscular development, but the injured limb was somewhat wasted and flabby from inaction. Two days after admission he was put under the influence of ether, and Reid's manipulation was tried. The head descended as usual, until it came opposite

to the lower margin of the acetabulum, but from that point, as the limb was brought down, it slipped on to the foramen ovale. The manipulation was repeated several times, with all care, varying the degree of abduction on the various trials, but without success. It was impossible to make the head rise over the lower border of the acetabulum so as to slip into its place. After numerous thorough and careful trials, the manipulation was abandoned and the pulleys ordered to be applied. Before this was done, it was thought best to place the head of the bone on the foramen ovale, and from that point to try and reduce it by the usual method recommended by Sir Astley Cooper. The head was accordingly placed on the foramen, and while the upper part of the thigh was grasped by an assistant and lifted strongly outwards, I took hold of the ankle and made extension and adduction. The head seemed not to move at all under this force, and while making strong adduction a crack was heard, everything became loose about the joint, and on examination it was evident that a fracture of the cervix had taken place, leaving the head in the foramen ovale. There was nothing further to be done but to put the limb up in the straight apparatus, hoping that, if we could obtain union, he would have as useful a limb as those ordinarily left by fracture of the cervix, and certainly a better limb than if the dislocation had been untouched. Thus far, Nov. 25, everything has gone well, and promises union, with a shortening of about an inch. I am sorry that we must accept this case as one of failure of the new plan after what we considered a fair trial; for myself, however, I do most profoundly believe that it failed simply because we have not yet learned enough about the manipulation to adapt it to the condition of parts concerned in this particular instance. That we shall yet acquire that knowledge, I see no reasonable ground to doubt. With regard to the fracture of the cervix, we were all surprised at the slight amount of the force which was competent to produce such a mortifying accident. It adds double force to the caution given above, when speaking of the possibility of that accident, and it is not a little remarkable that the paragraph containing that caution was written on the very morning of the day when the production of the fracture verified the necessity of the warning. Dr. Watson, in a note to me, speaks of a fact which he says, "I have on undoubted authority, viz: from one of the professors in the school of medicine in Toronto, Ca., that an accident, similar to that of case 14, occurred in that city, while the surgeon was attempting to reduce a luxation of the hip by Reid's method." Finally, it must be observed that the new plan is

entitled to none of the blame of the fractured cervix. The accident took place after Reid's manipulation was abandoned, and while we were attempting the reduction according to the old established and classical method.

*New York, Nov. 30th, 1854.*

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### **Caries of the Cuneiforme Internum and Medium, &c.**

BY HENRY H. SMITH, M. D.

Francois C., a Frenchman, æt. 39 years, was engaged in May last as a wood cutter. In June 1854, after having twice bruised his instep, he was attacked with inflammation of his left foot, attended by great swelling and stiffness. Notwithstanding the pain, he continued working until the effusion gathered and broke directly over the os cuneiforme internum. Being compelled to give up his work, he entered the Philadelphia hospital early in Oct. 1854, and was treated for his injury, but without much amelioration of his symptoms. In the latter part of this month I saw him and obtained the preceding account. The foot at this time was very much swollen from the ankle to the toes; was of a deep purple color, interspersed with spots of a brighter red, and had upon its dorsum one fistulous orifice over the os cuneiforme internum, another over the upper third of the first metatarsal bone, a third over the cuneiforme medium, and a fourth between the second and third metatarsal bones, or rather in the second interosseous space. A probe introduced into each of these openings readily entered the structure of the bones. There was no motion in the part, and there was a free, sanious discharge, with marked inflammatory disorder of the soft tissues. The constitutional symptoms were loss of appetite, deranged digestion, and quick pulse, (due to pain, &c.,) and his general habits were only moderately temperate. As I thought that the circumstances seemed to render it advisable to operate and remove the diseased bone, and he declined submitting to amputation till all other means had failed, I decided to resect the first metatarsal bone entire and scrape out the greater portion of the cuneiforme internum, hoping that the removal of these portions would eradicate most of the disease. This I accordingly accomplished in the usual manner, before the medical class, on November 15th. Under the use of the tepid water dressing, the wound did well, and the parts healed kindly,

much of the swelling disappearing, but as the other fistulous orifices continued open and the bones beneath them were also diseased, that is, the cuneiforme medium and second metatarsal, I decided to resect them also, which I did on Dec. 8th, by a careful incision on the dorsum of the foot, the tendon and anterior tibial artery being pushed to one side. After scooping out the cuneiforme medium I removed the head and upper third of the second metatarsal bone, and dressed the wound as before. Little or no trouble supervened; the wound healed kindly; the inflammatory action diminished, and on January 12th, Francois was walking about the ward, improved in health and with every appearance of a useful foot. The depression left by the removal of the bones has been much diminished by deposition and lateral approximation, and the toes are now comparatively useful, much to the patient's gratification, especially as "he has escaped amputation."

*Med. Ex.*

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### Dr. Hunton's Yoke Splint.

On the 13th of Nov. 1830, I caused to be made a splint, somewhat in the form of the sap yoke used by the makers of maple sugar, which I applied to Henry Allard of Johnson, Vt., who had fractured the cervix scapulæ. I have had two made since for fractured clavicle.

Some two years after inventing the above splint, my son, Sylvanus Hunton, then a student at the Vermont medical college at Woodstock, described my splint to Dr. Willard Parker, who had one made which he presented to his class with his approbation.

In Dec'r 1851, I first published the following description of the splint in the New Jersey Medical Reporter:

*A description of Dr. Hunton's Yoke Splint, by Ariel Hunton, M. D.*—I propose to give you a description of my yoke splint, which I think will be acceptable to the faculty. Twenty-one years ago last November, eighth day, at eve, I was called to a Mr. Allard, in the town of Johnson, and was informed that he had dislocated his arm at the shoulder. I looked at the patient, and saw the usual depression in dislocations of the part. I placed my fingers on the deltoid muscle, and perceived the soft yielding usual in such cases, but did not examine thoroughly, as I ought in any similar case, but pronounced it a dislocation and prepared to reduce it. When I raised the

arm I felt and heard a crepitus, which corrected my diagnosis. In order to avoid exposing my carelessness, I did not enlighten my assistants, but called for rags and bandage, made a pallet of the rags for the axilla and the figure of eight bandage, and dressed it (as I supposed,) *secundem artem*. I am thus minute, that all may see the propriety of thorough examination, before expressing an opinion.

I returned home in the evening, three miles, reflecting—this is not the best way to dress a fracture of the cervix scapula. After retiring to bed, I could not sleep, but pondered three hours by the clock, on the fracture I had lately done up, and thinking there is a better way. The thought at length came into my mind to use a splint resembling a sap yoke. I ruminated until I became satisfied that *this* mode would be preferable to any other I had seen.

The next morning I visited my patient, procured a mechanic, and had him adjust a splint according to my direction. Have it made to sit easy on the shoulders, stuffed or lined with cotton batting, the length to jut a trifle beyond the shoulders, with a pin near the ends of the splint. Firstly, apply the splint to the shoulder, then put a double kerchief under the axilla of the sound arm, and tie it over the splint, the pin keeping it in place.

The next step is to tie another kerchief under the fractured arm, and bring the top of the shoulder in contact with the splint; place the arm in a sling, and confine it to the side, and the work is done and well done. There are no tight bandages, or unyielding, tight-fitted splints, to cause swelling or inflammation. Lotions or any other applications are seldom required.

This splint is as well adapted to fractures of the acromion process or clavicle, as for the cervix scapulæ. If either of the fractured ends of the clavicle protrude upwards, which is usually the case, lay on a compress, and cause by the splint, the pressure required. If extension is required to keep the clavicle in place, insert a small kerchief or a piece of webbing in the axilla, and tie it outside the pin, on the end of the splint, and make the extension which is necessary. I have used this splint twenty-one years with success, and satisfaction to myself, that it is the best apparatus for these fractures. Soon after making and applying my first splint, I sent a description of it to Professor Parker, then connected with the Woodstock school of medicine. He procured one, presented it to his class and recommended it as the best apparatus for these fractures.

I wish it known as Doctor Hunton's Yoke Splint.

*Hyde Park, Lamoille co. Vt., Dec. 1851.*

In July 1854, a gentleman called at my office and presented me two yoke splints (a large and a small one) which he offered to sell me for fourteen dollars. I informed him I was the *inventor* of those splints, read to him the foregoing description from the Reporter, and declined purchasing. They were patented by some individual in July 1853.

On the 25th of October last I presented one of my splints to the Vermont medical society, then in session at Montpelier, and requested an investigation of my claim as the original inventor.

A committee was appointed by the president, consisting of Drs. Clark and Spaulding, who reported as follows :

The following resolution was adopted by the Vermont medical society Oct. 25, 1854 :

Resolved, that the yoke splint, exhibited by Doct. Hunton for the treatment of fractures of the clavicle, neck of the scapulæ and acromion process, is an improvement in surgery, and that Dr. Hunton is in our opinion the inventor of the same, and is entitled to the credit and benefit of the invention.

C. M. RUBLEE, *Secretary*.

I take this method to inform the *faculty* of the United States, that they are at full liberty to use my splint *at will*, requiring no other reward than their friendly wishes.

ARIEL HUNTON, A. M., M. D.

N. B. It is hoped that those medical journals, which advocate fair play and disapprove the meanness of patenting the property of another, will call attention to the above. A. H.  
N. Y. Jour. Med.

### Gum Mezquite.

This is the product of the mezquite tree, of which there are immense forests upon the elevated and dry plains in the Indian country lying west of the Arkansas. It is of a light amber color, and possesses properties similar to gum arabic. The quantity yielded by each tree is often several pounds, and by making suitable incisions in the trees, a man may gather thirty or forty pounds a day. If, as has been supposed, this gum will answer all the purposes of gum arabic, in medicine and the arts, its discovery is of great importance, as it can be afforded in any quantity required, at a very low price.—*Med. Recorder*.

### Injecting a Solution of Nitrate Silver into the Lungs.

The boldest practice that we ever heard of was that of Prof. Green of New York—who last year injected into a patient's lungs, through a tube introduced into the bronchial tube, a solution of nitrate of silver—40 grains to the ounce; at the time of his report he had injected from a drachm to a drachm and a half into the lungs of 32 patients each—and in many cases he had often repeated it. He injected these patients for tuberculosis principally. The effects of the injections are as surprising as the daring of Prof. Green in pursuing the practice. "No cough whatever, or any sense of suffocation, was produced by this operation, nor did the patient observe in the least the ordinary bitter taste of the solution. A few minutes after the operation she stated that she "felt a warm sensation" in the upper portion of the left lung (there was a large cavity in this portion of the lung) but no pain, or any unpleasant feeling whatever, followed the operation. The operation caused in many of the patients a great deal of expectoration." They were all doing well at the time of his report.

It is somewhat aside from our subject, but we must be allowed to philosophize a little just here. Prof. Green injected his patients with the most happy result. Suppose it had been otherwise—suppose that the first patient he injected had fallen dead from suffocation under his hands—he would have been damned from one end of the land to the other. Every journal would have raised the cry against him—he is a fool, a knave, a murderer, he might have known it—it would have been taken up on the other side of the waters and he would have been condemned as an idiot, and we believe that we should have joined in the "hue and cry" against him, and added our amen to every blow well laid on him. The world would have hunted him down as a malicious murderer. Why would all this take place? Simply because he had been unsuccessful, and no matter how laudable his object, he had been turned out of society, or had been hung as a common felon, and the world had responded with an emphatic amen. Such is the world. Reflections like these should teach physicians a lesson, as well also, as the world. It should teach physicians that when they strike out into some new plan of treating disease, they should sacrifice everything to attain one object, *success*. If you fail you are ruined. It should teach the world to throw the mantle of charity over the sins of erring humanity.—*Ga. Blister and Critic*.

### The Clamp Suture in Cleft Palate.

We recently witnessed an operation for this affection by Dr. J. Marion Sims, of this city, in which he used this peculiar method of suture. The case was a bad one; articulation very indistinct, and deglutition of fluids frequently attended by regurgitation through the nostrils. The clamp suture, composed of very fine silver wire, fastened to small leaden cross-bars, will remain innocuously in the tissues for an almost indefinite period, which constitutes its great superiority over any other suture. In this case the clamps were removed on the sixth day—the cure was perfect.

This is not, by any means, the first case of the sort in which Dr. Sims has applied this suture with success; and it is our opinion that the operation of staphyloraphy, by this method, will never fail, if properly performed.

It is well known that difficult and tedious labor sometimes results in the most deplorable injuries to the mother: such as laceration of the perineum, bladder, or bowel, and that these affections were wholly incurable till the introduction of the clamp suture by Dr. Sims. It is no wonder, then, that the profession, both in Europe and America, unite in according to him the highest praise for this great boon to science and to suffering humanity. And now, since he has demonstrated the easy curability of cleft palate by the same means, we cannot but hail it with delight as another triumph of American surgery.—*American Med. Monthly.*

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### Incompatibility of Sulphate Quinia with the Acetates.

BY JOHN M. MAISCH.

In pharmaceutical works we generally find among the incompatibles with sulphate of quinine, the alkalies, their carbonates, the alkaline earths, tannin, &c., which act by either separating that alkaloid from its acid, or, recombining therewith, forming an insoluble salt; nothing is said about acetic salts.

The acetates of the alkalies are valuable diaphoretics and diuretics, and therefore are much esteemed for their activity in febrile diseases, particularly the acetate of ammonia, in the form of spiritus mindereri, is extensively used. It was a short

time ago that a friend of mine received a prescription calling for a solution of 12 grs. of sulphate of quinine in 1 oz. of water with 1 oz. of liq. ammon. acet., which unsuspectingly was put up, but subsequently returned by the physician, the solution having deposited many crystals in the form of prisms. It is obvious that ammonia, which is the stronger base, must unite with the strongest acid, forming sulphate of ammonia and acetate of quinine, the latter of which, being nearly insoluble in water, is precipitated.

After repeating the same, I determined to make some other experiments, with a view to ascertain the peculiarities of this acetate of quinine, which has heretofore been little noticed, it seems, and the results which I have obtained may probably be of some use for further investigation.

When 6 grs. sulphate of quinine, by the aid of sulphuric acid, are dissolved in  $\frac{1}{2}$  oz. water, and this solution is mixed with liquid acetate of potassa (10 grs. in 1 dr. water,) the precipitate thrown down is curdy, consisting of minute crystals, and so voluminous that it does not drop out of the glass if it be turned upside down.

The solution of acetate of ammonia contains about 6 per cent. of that salt, making about 14 grs. in  $\frac{1}{2}$  oz. of the solution. The equivalent weight of acetate of potassa is nearly one-half as large again as that of the ammoniacal salt; 14 grs. of the latter would suffice to convert about 37 grs. of disulphate of quinine into the acetate, whilst 10 grs. of the former could not decompose over 19 grs. of the quinine salt. Still  $\frac{1}{2}$  oz. of spir. mind. decomposes 6 grs. of sulphate of quinine into a deposit of rapidly forming prismatic crystals, which are not near so voluminous as those formed by the potassa salt.

Again, if dilute acetic acid be neutralized by magnesia,  $\frac{1}{2}$  oz. of that solution precipitates the above solution of quinine partly in needles, combined to stars of a silky appearance, which also appear on the mixture of a solution of acetate of zinc.

The crystals of acetate of quinine form more beautifully, though also more slowly, in the solution of sulphate of quinine in diluted muriatic acid. I have obtained them in beautiful groups of feathery, tree, or fan-like appearance. I have satisfied myself that these precipitates consist of pure acetate of quinine; those formed by the potassa and zinc salt were charred in a porcelain vessel over the spirit lamp, destroying the quinine salt; the residue did not effervesce with acids, neither water nor acid took up anything by boiling; therefore nothing inorganic was contained in the salt.

Sometimes the crystals are at first transparent, but become

opaque after being left under the liquid for a while; they do not dissolve, or only very little in cold water, and in the cold solutions of acetate of ammonia, potassa and soda, but they all retain a larger portion in solution after they have been boiled with the acetate of quinine. Chloride of ammonium seems to dissolve a larger portion of it, for when a solution of sulphate of quinine is mixed with a strong solution of sal ammoniac, the precipitate occasioned by acetate of potassa is less in quantity, at all events it does not stiffen the mixture, as is the case if that addition is not made.

To repeat these experiments, it is necessary not to add any more of the acid than is exactly required for dissolving the sulphate of quinine; an excess of acid decomposes the newly formed acetate of quinine, a part of which, or all, goes in solution again as sulphate or muriate of quinine.

The same experiments may be made with muriate of quinine, on dissolving it in dilute muriatic acid; in this case the crystals generally appear slowly.

For medical use none of the salts of quinine can be used in mixtures together with any of the acetates. But should such a combination be desirable, it may be done by dissolving the *pure alkaloid* or the *acetate of quinine* in acetic acid, which then will be compatible with any of the soluble acetates, as well as with the chlorides and sulphates of the alkalies and alkaline earths.

Although the mixture of solutions of sulphate of cinchonine and the acetates of the alkalies does not produce any precipitate, still it would be injurious perhaps to prescribe such a one, as they also decompose each other, forming a soluble acetate of cinchonine and sulphate of the alkali, the quantity of which will be increased by the acid necessary for obtaining the solution of the sulphate of cinchonine. Also in this case it would be advisable to produce first a solution of acetate of cinchonine.

*Philadelphia, January, 1855.*

*Am. Journal Pharm.*

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### Parasitic Growth of the Ear.

Dr. Clark presented a specimen of parasitic vegetable growth removed from the ear of a lady, æt. 60, by Dr. Kissam. The ear had been syringed, after emollient applications, for the removal of a suspected accumulation of inspissated cerumen causing deafness. The edge of a white membrane

presenting, Dr. Kissam was able to withdraw by the forceps what seemed to be a white membranous lining of the whole lower external ear. It was moulded to its walls, having on its surface an impression of the bones of the tympanum. On its removal the hearing of that side was very much improved. The other ear was to receive the same treatment. (See minutes of meeting Jan. 24th.) On microscopic examination, the mass of the membranous accretion was found to consist of a vegetable product, belonging to the same general class as the *oidium albicans* described by Dr. Clark at the meeting of this society, Jan. 25th, 1854, yet unlike it in being unicellular, or at least composed of cells of unusual length. The stem was somewhat branched, and the spores appeared to be more or less vested in the epithelial cells. Dr. Clark thought that the plant probably grew from the epithelial lining of the external ear. He believed that a vegetable growth in the ear had not before been recognized as a cause of deafness.

*Am. Med. Monthly.*

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### On Gonorrhœal and Syphilitic Rheumatism.

BY GEORGE BUDD, M. D. F. R. S.

One of Dr. Budd's latest clinical lectures entered at some length into the subject of syphilitic rheumatism and gonorrhœal rheumatism, two diseases often met in practice, and not unfrequently confounded.

"Syphilitic rheumatism is a very frequent disease," said Dr. Budd, "and not only frequent, but lingering, slow, and tedious, with pains at night not to be mistaken; sleeplessness and general derangement of the system. Two, or even three or more years may elapse, as you are aware, from the first primary sore or syphilitic ulcer, till the invasion of this disease; we generally knew it as syphilitic periostitis; in the generality of cases no doubt it arises in this form, and is attended with syphilitic eruptions and other symptoms, secondary or tertiary—I do not intend, of course, to speak of syphilis now, but of this syphilitic rheumatism, as we meet it in so many shapes up stairs in the hospital. You will generally know it by this, that the pains are worse at night; so much so, indeed, as to prevent sleep for weeks and months together; the bones are affected, not the joints; and those bones, it is curious, which are most exposed—the lower end of the femur, the crests of the ilium, the ulna, the collar bone, the shin

bone—you are no doubt familiar with these facts. But how does this pain come on? Now it is, most commonly, not like rheumatism, it is rather inflammation of the periosteum of the bone with effusion under this membrane; sometimes it is rather extensive and “pits” on pressure. A layer of lymph, probably, is deposited between the periosteum and bone; if it be treated speedily, all this matter may become absorbed; if allowed to go on as is frequently the case, the lymph becomes ossified, and we have what you see so frequently in our out-door dispensary patients, “nodes,” originating in this kind of inflammation; first coagulable lymph, which becomes organized into bone in the same manner, I think, as bones unite when broken; the lymph entangled between the periosteum and the bone influencing the system almost as if fracture had occurred. Nodes, or bony swellings, do not always form, as some of the matter is absorbed. A node as large as a walnut is a large node—the bone itself may become inflamed. A case in king’s college hospital, for instance, looked on as cancer of the bone, out of doors, I pronounced to be this form of syphilitic rheumatism; it was, in fact, inflammation of the bone and effusion of matter bound down by periosteum, sometimes ulceration follows in the periosteum, a very unpleasant occurrence, bits of dead bone come away, more especially in the flat bones of the skull, the bones of the nose, &c.; they are now, happily, not so frequent as they used to be.

In private practice, last year, I met a case of this kind, periostitis of the bones of the head; there was a large ugly ulcer. I got Mr. Partridge to see the case too, who removed a piece of dead bone; we could see the pulsations of the brain underneath. The poor gentleman got albuminous urine, erysipelas, and died. This exfoliation is more common in the flat bones—nodes more common on the tibia. A very great point is to seize the nature of the case early. Necrosis of the bones of the nose takes place; the palate bones are also lost. I remember, a few years ago, the hideous and horrid spectacles one saw walking about in London, and at hospitals. The disease is now not so common. Disease of the palate, you should recollect, is now very curable: at the time I speak of it was all but incurable. It begins as ulceration of the mucous membrane of the mouth, which, if not cured, may lay bare these bones. We saw a woman from Richmond here lately—a case in point, necrosis of the bones of the nose. We detected these ulcers and cured them. Remember, then, this disease is in the bones and mucous membranes; rheumatism is more common in the ligaments and

joints. Syphilitic inflammation may affect the ligaments of the knee. You will find another useful diagnostic in the fact that there is no fever. The disease is chronic, of indefinite duration, and attended with a previous history of other secondary symptoms, not to be mistaken. Forty or fifty years ago there were no possible means for curing this disease; a hundred persons to one now were walking about town with the bridge of the nose gone. I believe one of the greatest practical discoveries of this century was that of iodide of potassium as a cure for this disease. We are indebted for it to the late Dr. Williams, who lived near Guy's hospital. I often met him, and he said he had set himself out to discover some specific for two diseases then thought incurable; one was consumption, the other was a disease of the bones of the nose from syphilis. Every new remedy, as it came out, he tried, and amongst others lighted on iodide of potassium. Poor Dr. Williams! I believe if ever a man deserved a pension or a peerage for doing a grand thing, and benefiting humanity, he did; but peerages or decorations are not much in the direction of medical discoveries. He not only did not get either, but did not get any practice, and is now forgotten. "Iodide of potassium" is as much a specific in these syphilitic rheumatism cases and diseased bones and nodes, as mercury in the primary Hunterian sore. Give small doses—two grains—of the iodide twice a day to begin with; when you have given an overdose, you will find pain over the eyebrows, sneezing, papular eruption on the skin, a taste of iodine in the mouth. These results are, however, very uncertain, and one grain sometimes will be found to affect a particular patient as much as ten grains will affect another individual.

I think you cannot be too particular in your mode of giving iodide of potassium; it is a very important point, for instance, to give it while fasting, as it is decomposed by the hydrochloric acid of the gastric juice in digestion, setting free pure iodine; now remember it is not iodine cures, nor has iodine, perhaps, any effect as iodine; it is the salt iodide of potassium (as phosphate of lime enters into bones not phosphorus,) nay, I would always give iodine of potassium with free soda to counteract this acidity of the stomach; if thus carefully given, these pains of syphilitic rheumatism soon begin to give way; you may stop it for a while, and at intervals renew it; if ulceration should have set in, more particularly with necrosis, sarsaparilla is a good medicine. Cod-liver oil, also, you will find a most valuable remedy, more especially if there be—as there often is—a tendency to phthisis: we have seen two cases of this nature lately, the poor woman A. H.,

and the Italian professor of languages. You are familiar with these cases, and will recollect the value of the medicines as now indicated.

We next come to speak of gonorrhœal rheumatism, a very troublesome affection also, as I found at one time in the Dreadnaught hospital ship, near Greenwich. There are two or three of these, so to call them, secondary symptoms, appertaining to gonorrhœa; gonorrhœa swelled testicle, gonorrhœal ophthalmia, and, occasionally, this gonorrhœal rheumatism; this disease is very peculiar; we will find, perhaps, that there is but a single joint affected; the ankle or the knee, possibly; we will find the inflammation to be painful in the highest degree; effusion very great; constitutional disturbance most obstinate, particularly at changes of weather; the joint affected has a gummy, or doughy feel; quite specific. Now this is a most intractable disease; it is, perhaps, rather more like gout than rheumatism, but the remedies for gout will not cure it with the same facility; the best mode of treatment I have found, is to blister the joint, or rather above the joint; afterwards, paint with iodine, and give internally the nitrate of potash, and alkalis.—*Medical Circular—from the Montreal Journal.*

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### Amputation of the Tongue.

Maisonneuve recently removed the tongue for a cancerous affection. The patient was president of the committee of vaccination, and was accustomed to hold the small glass tubes, in which the matter was preserved, in his mouth. The sharp points of glass often wounded the tongue, and these punctures were followed by pimples; induration supervened, which he endeavored to remove by cauterizations. This aggravated the disease and led to deep ulceration; to this the actual cautery was applied, which only gave still greater activity to the affection. The tongue became enormously tumefied; speech was impossible, and only liquid diet could be used. Various remedies were employed without benefit, and amputation was finally decided upon. The operation is thus described by the operator:

“The patient having been submitted to chloroform, I first incised, on the medium line, the lower lip and the soft parts of the chin. Next, with a chain saw, I made the section of the lower jaw; the two branches of which being thus separated, I was enabled to grasp the tongue and draw it out. By

a rapid dissection, the diseased organ was then separated from the healthy parts, as far as beyond its anterior half, and over an extent of one inch. The sublingual gland had also to be sacrificed. Ligatures were applied upon the important vessels, so as to prevent hæmorrhage. After this operation, the branches of the jaw were brought together, and maintained in contact, by means of thread rolled round the incisor and canine teeth; the ligatures placed upon the vessels were directed under the chin, in the inferior angle of the chin; and the edges of the division were united by means of the twisted suture. Notwithstanding the extreme gravity of this operation, no accident resulted. The union of the external parts was effected by first intention; the enormous loss of substance was rapidly repaired; the bones became consolidated; and, what is remarkable, forty days after the operation, the patient had recovered his speech, and the faculty of seizing and masticating his food. On examination, the tumor was found to belong to the class of epithelial cancroïds."—*Jour. of Med.*

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### **Twin Pregnancy.**

BY DR. BEDOR.

A woman was confined, on the ninth of November, in the lying-in department of the hotel Dieu of Troyes, of twins, presenting extraordinary peculiarities. The mother, aged 32 years, of good conformation, had safely gone through four accouchments. Mad. Ricard, the midwife of the hospital, was in attendance. A female child, evidently at full term, well formed and possessing the external attributes of perfect health, was born. The placenta, in the centre of which was implanted the cord, soon followed the delivery of the child. There was nothing to lead to the thought of a second child; and the midwife was about leaving the patient, when she complained of abdominal pains. The uterus was now carefully examined, a child was extracted, and, soon after, the placenta. The child—a male—was about in the fifth month of development, and, as well as its annexes, was in an advanced stage of decomposition. This tardy delivery of a fœtus at least four months dead and decomposed, with its annexes in the body of the mother, without this latter having been the least affected by it, and the simultaneous birth of the twin sister of this little cadaver, full of life and in the enjoyment of excellent health, cannot be viewed else than an extraordinary case.—*Gazette Medicale de Lyons.*

### Fatal Asphyxia.

At the royal medical and chirurgical society, (May 9th,) Mr. George Edwards of Wolverhampton, detailed the following interesting case, which occurred in a child of 8 years of age, who, while at play, was suddenly seized with symptoms as of a fit. He was quickly carried home, and became violently convulsed, although retaining consciousness and the power of utterance; the countenance became extremely anxious, and he uttered the expression that he should die. In the hurry of the moment there was no opportunity of getting any distinct knowledge of the previous history, beyond the surmise that the boy had swallowed something. The trachea was immediately opened, a little air issued from the opening, artificial respiration was attempted, but without effect, as the child gave but two gasps after the operation, and died. The post-mortem examination revealed the presence of a foreign body touching the under surface of the epiglottis, and extending through the rima glottidis into the larynx; the substance was whitish, and covered with mucus; on a very slight examination, it was evident that the body was a bronchial gland. Upon slitting open the trachea, the spot from whence the gland had issued was soon observed; it was on the posterior part of the right side, just above the bronchial bifurcation; the opening was ragged and irregular, and communicated with a cavity behind, sufficiently large to contain a nutmeg. No other evidence of disease was observed.

*Dublin Hosp. Gazette.*

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### Death from Chloroform.

The following remarks we take from the Medical Circular: Several operations were performed at the hospital last Wednesday, but after we had left, not expecting anything of greater moment, a poor man was admitted with bad retention of urine. Great difficulty was found in passing the instrument, till it was at last arranged to try again under the effect of chloroform; the man was scarcely brought under its full action when he began to snore as if something was wrong; his face became suffused and red, the inspirations very seriously embarrassed. Attention was at once riveted on these signs of impending danger, and cold water was freely dashed over the face and

chest, the root of the tongue was drawn forward and artificial respiration tried; some signs of reaction set in, but they were only of temporary duration. Galvanism was tried, but all was of no avail—the man was dead.

At the post-mortem, as we had almost anticipated, having seen the disease now so often, as described by Dr. Quain, there was a large, soft and remarkably flabby heart; on examination under the microscope, every fibre in the left ventricle appeared to be undergoing fatty degeneration; the lungs were also congested; the poor man was only 29 years old, but appeared almost double that age. It appears rather too clear, that where such disease exists, as we said on a former occasion, there is very great risk in exhibiting chloroform. Mr. Erichsen, who used the utmost skill, and had recourse to every possible mode of resuscitation in the case, made some able references to the subject this week. We do not believe such cases will lead to a discontinuance of chloroform, but rather to more caution, and in minor operations a substitution of ice, as recommended by Dr. Arnott.—*N. Y. Jour. Med.*

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The 8th annual meeting of the AMERICAN MEDICAL ASSOCIATION will be held in the city of Philadelphia on Tuesday, May 1, 1855.

The secretaries of all societies, and other bodies entitled to representation in the association, are requested to forward to the undersigned correct lists of their respective delegations as soon as they may be appointed; and it is earnestly desired by the committee of arrangements that the appointments be made at as early a period as possible.

The following are extracts from article two of the constitution:

“Each local society shall have the privilege of sending to the association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half of this number. The faculty of every regularly constituted medical college or chartered school of medicine shall have the privilege of sending two delegates. The professional staff of every chartered or municipal hospital containing a hundred patients or more, shall have the privilege of sending two delegates, and every other permanently organized medical institution of good standing shall have the privilege of sending one delegate.





Lith. of Ritchie & Dumasant Richmond, Va.

Reichen

Charles P. Johnson

# THE STETHOSCOPE.

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THE PROPERTY AND ORGAN OF THE

## MEDICAL SOCIETY OF VIRGINIA.

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Edited by a Committee of the Society.

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VOL. V.

RICHMOND, VA., MAY 1855.

NO. V.

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### Medical Systems.

BY RO. W. HAXALL, M. D. OF RICHMOND, VA.

When we trace retrospectively the progress of medicine even after it had begun to assume an independent existence, we must be struck with the various mutations which have successively occurred, and which may have tended in a great degree to diminish its usefulness. Hippocrates was the first perhaps who established something like principle in the practice of the art. His doctrines, however, were speedily dissented from, and different sects were instituted, the leaders of which, in conjunction with their disciples, assailed opposing opinions with all the bitterness of polemical warfare. The empiric, the dogmatic, the methodic and other sects each had their advocates, and each passed away to give place to the pretensions of some more fortunate and favored originator. And when we descend to more modern times, when the kindred sciences had scattered far and near their reciprocating influences, we have still to regret that the scintillations of some erratic and brilliant genius have occasionally lured us from the teachings of a maturer and a sounder judgment.

In thus admitting the mutability of the progress of medicine, it might possibly be supposed that I am willing to derogate from its claim to the appellation of a *science*. But it is not

so. I know, indeed, that wherever *theory*, unsupported by the only prop which could give value to its doctrines, namely, the indisputable record of *facts*, has sought to win for itself an imperishable existence, disappointment has invariably followed in its train, for the very reason that the foundation upon which it was reared had been too imperfectly contrived. Medicine is emphatically a record of facts. General principles are but the offspring of reiterated observation; and he who trusts to his own powers of *invention*, launches his bark upon the unsteady sea of empiricism and presumption. In proportion as the studies of the closet have been abandoned for the more instructive and enduring observation of clinical research, by so much has medicine ascended in the scale of importance and accuracy; and it may not perhaps be deemed presumptuous, if now her votaries are almost ready to class her among the number even of the demonstrative sciences.

It is not perhaps to be wondered at that improvement in medicine for a length of time, continued to advance with a tardy step. The very elements which combined to give the greatest advancement to the science were yet in embryo, or at least but most imperfectly understood. Physiological and pathological anatomy, upon the basis of which alone can disease be thoroughly investigated and comprehended, had received no impetus from the devotee of medical science. Philosophy, such as it was, was still encumbered with the senseless jargon of the schools; ignorance presumptuously assumed the garb of knowledge, and the gloss of error was strangely mistaken for the mild and pervading light of truth. *Authority* too exercised its baleful and depressing influence over the minds of men. Philosophers, or they who bore the name, condescended to arrange themselves into different sects, and enlisted under the banner of some favorite school or chief, whose doctrines they energetically espoused and whose volumes they perused, instead of seeking information from the exhaustless book of nature. But the genius of Bacon ere long shed its reviving influence over the domain of knowledge, by establishing a positive philosophy and the inductive method of reasoning as deduced from rigid analysis.

The reputed uncertainty attached to medicine, and with which it has so often been reproached, belonged in a greater or less degree to all the departments of knowledge prior to the introduction of positive philosophy. Other sciences earlier received its vivifying impression. In later years, however, it has commanded a wider range, and that which once bore no higher appellation than the *art of medicine*, has been justly dignified with the name of a science.

Whenever medicine shall be entirely divested of the trammels of authority, and submit herself to the rule of induction and analysis, mere *opinion* can no longer be received as if it were a fact elicited from careful demonstration—crude hypothesis will be substituted by well grounded theory, and the arbitrary dictum of the master will no longer be taken as a guide, when a rational method and sure principle point to a different conclusion. As the results in chemistry and mathematics are obtained by patient investigation and analytical research, so should each case of disease be regarded as a problem, only to be solved by a process of reasoning founded upon certain and established principle. When submitted to such an ordeal, authority is disrobed of the imaginary importance with which it has been clothed, and the road to scientific acquisition will be freed from all those obstructions with which earlier and more prejudiced travelers have vainly thought to hamper it.

Another cause has operated in no small degree as a barrier to the advancement of medicine. It is the reliance which so many are disposed to place upon what has been called *experience*. Than this, in its commonly accepted sense, there can scarcely be a more fallacious guide. In other sciences, invariable and unerring results, with the nicest exactitude follow certain causes, just because similar experiments can at all times and in all places be prosecuted under similar circumstances. An acid and an alkali, for example, when combined in certain proportions, will produce the same result, whether the trial be made in the laboratory of our medical college or in the morasses of Florida. But this precision cannot obtain in the practice of medicine, because no two individuals are perhaps ever to be found in an exactly similar condition. So much diversity is seen in the temperament and constitution of individuals, giving rise to such various combinations, that it would be in vain to expect that rules could be established invariable and unalterable in their application.

The term *experience*, such as it is generally understood in its application to medical practice, should not be confounded with *observation*. Experience is satisfied with certain rules and certain formulæ, which in their limited range are thought to be applicable to all cases which may occur; and approved prescriptions, consecrated by the recommendation of some older and *experienced* head, are substituted for the labor of patient enquiry and analytical study—while observation, untrammelled by the ipse dixit of a higher professional eminence, seeks only the actual and well ascertained condition of the organism for its incentives to action. And this must ever be

the case, where rational enquiry and sober research can no longer derive satisfaction from blind empiricism and indecision. It is impossible that prescribed and *positive* instructions, unchangeable in their application to the varied conditions of the body, can ever subserve the purposes of enlightened investigation; for the structure of the human frame, with all its diversified movements and the intricate play of its functions, bears no resemblance to that lifeless mechanism, which, in some piece of automatic ingenuity, readily answers the demands of its fabricator and guide. Each case of disease must become the subject of calculation, based upon fixed and accredited principle; and the method of calculation can be none other than a profound consideration of the phenomena of life, of the elements which enter into the formation of the organism, and of the physiological and pathological conditions of the system, as revealed by clinical and autoptical examination. This is the only true method of gaining an *experience* which may prove valuable to its possessor, and an untiring observation can alone develop its practical worth.

That the cultivation of medicine has not always been pursued in a spirit of analysis and induction, has resulted from the faulty manner in which former investigators have followed up the subject, and not from any intrinsic difficulty in the applicability of these principles themselves. But a new era in the science of medicine has arisen, and vague hypothesis has been made to succumb to the superior claim of demonstration.

The *systems* which at the present time demand the attention of physicians, and which possess advocates in greater or less number in every part of the world where medicine is actively cultivated, may be arranged under three heads, viz: Symptomatic, organic and physiological medicine. To each of these divisions I shall direct a few observations explanatory of their objects, and of their results in a practical point of view.

Symptomatology, or the history of the symptoms of disease, as illustrative of the *nature* of disease itself, may date its origin from the earliest times in which medicine received a rational cultivation. In default of a correct knowledge of physiology and anatomy, both special and pathological, the various symptoms, as they arose, were grouped together, and, in the opinion of the advocates of the doctrine, constituted the very essence of diseased action. Hence, the sole aim of those who pay but little regard to the two other important systems alluded to, is to combat in the best manner they may the symptoms themselves. But in this they most assuredly mistake the effect for the cause. Symptoms are but the rational exponents of disease, which the uneducated as well as the

learned may recognize, and which must invariably proceed from a certain morbid condition of the organ upon which they depend. They tell us that the organ suffers, but they do not always inform us of the *nature* of its suffering and its actual condition, which is in truth the disease. And indeed we may assume another position, and venture the assertion, that from their occasional obscurity, they do not invariably enlighten us as to the location of the organ itself. Again it may happen that other tissues than those which are the true seat of lesion, may exhibit the phenomena of disease. In convulsion and in paralysis, the muscles alone appear to be diseased, although we now know that the nervous centres, upon which muscular contractility depends, are the true sources of diseased action.

Although the close observation of general symptoms is a work certainly of infinite practical importance to the physician, yet must they lose much of their real value if they cannot be ultimately referred to the lesion from which they proceed. This it is which constitutes their importance, and when thus studied and understood, they present to the enlightened, sources of information without which it would be difficult to act with judgment and precision. "Symptoms are the instruments by which a knowledge of disease is to be acquired, by which it is recognized; but they are not the disease itself, nor do they compose the knowledge of the disease." They, therefore, who base their rule of practice upon symptoms alone, without regard to the condition of the organ from whence they proceed, become the advocates of a doctrine which will often conduct them to discomfiture and disappointment.

*Organic* medicine presents claims to the consideration of the physician which should not be disregarded. Until a comparatively late period, the practice of autoptical examination was not often instituted: and when resorted to, the minute and critical inspection of the present day was substituted by a method far too general in its deductions, and too faulty in its manner. To France it is we must look, if not for the earliest, at least for the most zealous and successful advocates of pathological anatomy; and many exalted names have left recorded evidences of their industry and ability in the publication of works which are to endure so long as demonstration and fact are held to be superior to authority and theory.

The object of *organic* medicine is to teach us, by ocular demonstration, what may have been the condition of the suffering viscus. The various changes which have taken place in the tissues involved, from the first stage of irritation to their ultimate disorganization, are exposed to observation;

and the several gradations in the destructive process are thus recognized and appreciated. If any one chooses to regard the alterations of structure as merely the *effects* of disease, I shall offer no objection in this place to the proposition. I consider such alterations as the ultimate link in the general train of disordered actions. It is thus that we are enabled to trace up to their commencement the earliest deviations from a normal condition; and by thus proceeding step by step, we arrive at the knowledge of the first aberration from health, which may be regarded as the *proximate* cause of disease. When by such a process we become acquainted with the several changes in the organic elements and the tissues which constitute the organs, we have reached a point of information, when conjoined with a proper amount of physiological knowledge, eminently beneficial in a practical sense. Although the resources of medicine are but of small avail when disorganization of an organ has supervened, yet, taught by pathology what are the alterations of tissue to be apprehended, the discriminating intellect will have anticipated them all, and, by judicious remedial agents, will often succeed in preventing their occurrence.

The facts, then, which are elicited from the cultivation of organic medicine, are certain, and from the knowledge which it imparts, there can be no appeal. Yet, when considered alone and isolated, much of its importance is lost, so far at least as any practical result is to be attained. It is in guiding us in the path which leads to the proximate cause of disease, and in enabling us to determine with certainty the character of this cause, that an estimate so deservedly high has been placed upon the revealments of pathological anatomy.

Physiology, in the language of Majendie, "is that natural science which has for its object a knowledge of the phenomena which are peculiar to living bodies." Before we can become acquainted with the derangements of function, it must necessarily be that we should have studied the healthful play of the organs. So soon as an aberration from their normal condition supervenes, the train of individual and reciprocal action is interrupted, and we enter at once upon the domain of what has been termed *physiological medicine*. Its object is to unravel the mysteries of the vital actions; to trace the impressions which are made by physical and moral agents upon the organism; to mark the laws by which these varied impressions are governed; and by understanding, as far as we are able, the changes to which the organs are subjected, thus to arrive at the very *nature* of disease.

Were our systems of physiology perfected; did no uncer-

tainty hang over principles which perhaps may have met with a very general acceptance; had we infallibly ascertained the laws which regulate vitality—the method upon which I am now speaking would conduct us, with the nicest precision, in all our investigations. And it is upon the supposed correctness of physiological knowledge, in many of its details unquestionably proved to be true, that our system of practice must be based.

The manifestation of symptoms, as indicative of deranged functional action, is of course absolutely necessary for the proper comprehension of that condition which is opposed to health. But it will be perceived from what has been said in relation to the three systems upon which I have commented, that in a practical point of view, physiological medicine lays claim to a higher degree of consideration than does either organic or symptomatic medicine. And in truth very many of the systems which were once in vogue and have now passed away, were based upon physiological principles; and they have thus passed away, because further investigation and research have proved that the foundations upon which they stood were wholly untenable. The humoral pathology had its day, and many and talented were the advocates employed in its behalf. The mechanical and chemical theories were based upon the principles of physiology which were then prevalent—but they yielded at length, from the impossibility of erecting an enduring system upon the unstable basis of an hypothesis.

In regard to the principles and practice which govern us at the present day, we cannot pretend to anything like infallibility. Whenever sure and certain principles, however, have been established by repeated observation, they cannot fail to form the data for a rigid calculation. The systems of Brown, and Darwin, and Cullen, and our own distinguished countryman Dr. Rush, were acknowledged to be superior to any which preceded them. But they were defective, because analytical and pathological anatomy had received but a partial cultivation, and physiological knowledge had not attained to certainty in many of its present accredited principles.

While I have thus held up in somewhat bolder relief the importance of physiological medicine, it must be apparent that I have not derogated from the absolute necessity of a thorough acquaintance with the other systems to which I have adverted. With an accurate knowledge of symptomatology and the abnormal conditions of the organs, there can be no doubt that disease may in the general be successfully combatted. But to comprehend it in its fullest extent, to trace

it out in its widest range, it will be admitted that pathological anatomy must lend its powerful aid ; which, by instructing us in the various forms of disorganization which may ensue, will thereby more effectually arm us with the ability and the means of prevention.

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### **Typhoid Pneumonia.**

BY JOHN C. HAZELETT, M. D. OF FAIRMONT, VA.

Observing in the April number of the *Stethoscope* a plan of treating this formidable disease, by R. W. I'Anson, M. D. of Chesterfield, Va., I would ask the privilege to make known to your readers my observations and plan of treatment. For several years past, a large portion of our mountain country has been visited by that insidious disease, typhoid fever, and in many sections, of a most malignant type—occurring generally in the latter part of summer, and prevailing to about mid-winter. Upon the subsidence of this, pneumonia supervenes, prevailing generally upon our table lands, and invariably of a typhoid character.

The first symptoms, in many cases, could readily be mistaken for typhoid fever, but the stethoscope reveals the hidden secret—the pneumonic tendency. While others are ushered in with intense pain—a chill, or difficult breathing, followed soon with prostration of muscular strength—this, by all the varied symptoms peculiar to the disease. But every case is well marked by copious expectoration of tough mucus, occasionally tinged with blood. The symptoms indicating the disease are decidedly inflammatory. Yet, it is not amenable to the routine of antiphlogistic remedies—for calomel, pressed to ptyalism, I found decidedly injurious, and have discontinued its use, except as an occasional purge, and then in combination with some other cathartic. I adopted this course. Upon visiting my patient, I almost invariably prescribe a brisk purgative dose of calomel and rhubarb—commencing at the same time the administration of a solution of tartrate of antimony, in as large doses as the stomach will bear ; but when it acted as an irritant to the stomach or bowels, I combined it with a few drops of tinct. opii—using at the same time a decoction of *asclepias tuberosa*, or pleurisy root, chiefly for its diaphoretic properties, it being at the same time an expectorant. Using ablutions freely, at least

twice per day, the temperature of the water be regulated entirely by the feelings of the patient.

In no case did I use the lancet and in but few the cups, and then cautiously. My object was to reduce inflammatory action—at the same time, from the peculiar tendencies of the disease, to husband the strength of the patient.

Under the above plan, the violence of the inflammation rapidly subsided. As soon as this was done, I applied a large blister, completely enveloping the diseased lung, or if both were affected, then both lungs. These I renewed every twenty-four to forty-eight hours, until expectoration was free or respiration natural. Then, if the powers of the system began to sink, I employed stimulants and tonics, and amongst the whole list of tonics, none operated more favorably than quinine given in small doses, often repeated.

The above is a general outline of my plan of successfully treating this disease, varying, however, according to all the attending circumstances of season, violence and locality; yet, it is one I can confidently recommend to the faculty.

If timely commenced and judiciously persevered in, it cannot fail in producing a happy and favorable result, in speedily restoring to family and friends one who but a few hours before was upon the very brink of the grave.

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### Operation for Strangulated Inguinal Hernia.

BY J. A. HUNTER, M. D. OF LEWISBURG, VA.

Was called to see Aenas Ellis, æt. 84, on the night of the 15th of May 1846. This old gentleman had for twenty-five years been the victim of inguinal hernia, was the Nimrod of his neighborhood, and at the same time filled his place as a Thompsonian Æsculapius of no mean reputation. Against the inconvenience of this protrusion he had protected himself by a well adapted truss. The excitements of the chase and his deadly incursions with Bruin, from which he first dates this misfortune, had conjointly merged him into the more learned duties of neighborhood physician, and under this euphonious cognomen, had lived up to his four score and fourth year. At this period of his history I was called to see him, fifteen miles distant. Found him suffering from pain over the entire abdomen, rather paroxysmal, followed by sickness and vomiting stercoraceous matter, great anxiety, restless-

ness, quick, hard pulse and coldness of the extremities. The patient being sensible of his situation, called my attention immediately to the rupture, when I found a well developed case of strangulated hernia. Having made every ordinary effort to relieve the protrusion without success, I was persuaded that the stricture was not only unyielding, but apprehensive of the existence of long standing adhesions—being well convinced that nothing short of an operation could relieve him, even at his advanced age, with “time and opportunity” at my command, I felt great disinclination to take a course so important and responsible. I demanded a consultation, and sent for Dr. Wm. Patton of this place, distant fifteen miles, who responded promptly to my call. We again tried every manual effort to reduce the stricture—instituted auxiliary means, under favorable circumstances, such as our combined force could impart, without success. As a last resort the operation was determined upon, and preparation immediately made. The operation was performed in thirty minutes, without any interruption or any asthenic potion. Found the strangulated part in a good condition; dilated the stricture at the internal ring; broke up some recent adhesions and returned the parts without any difficulty, feeling no apprehension for my patient, if his system responded to the shock it had passed through, and escaped the dangers of peritoneal inflammation. The wound was nicely closed by sutures, sustained by a compress and roller. Placed him in the horizontal position and left him at rest.

Eight hours after, gave him  $\frac{3}{4}$  i oleum ricini, followed by the best results. Continued with him five days, watching closely his condition—found everything progressing favorably.

Saw him every second day during the next week. At the end of the sixteenth day, discharged him convalescing.

Mr. Ellis' recovery was very rapid, his feelings of gratitude and admiration having installed me into his entire practice; and I doubt not, could he have recalled his time, that he would have been a true and faithful disciple of the old school.

*Remarks.*—This case is only interesting on account of the extreme age of the patient at the time the operation was performed (the oldest successful case I believe on record) together with the important fact, that up to the time of his death, eight years after the operation, he never was under the necessity of wearing a truss, *clearly indicating a radical cure.*

### **The Stethoscope.**

It will be perceived, from the published proceedings, that the medical society of Virginia has ordered a sale to be made of its interest in this journal.

A brief statement of the circumstances leading to this action, we feel to be due to the many members of the society who do not attend its meetings, and especially to the subscribers to the Stethoscope.

The ownership of an organ of intercommunication by the state society has been firmly opposed by certain interests, from its inception to the present moment. Its advocates and projectors believed that a journal thus owned by the society, subjected to its direction and control, issued under its imprimatur, would best subserve the great purpose of collecting and diffusing medical information, and maintain the common welfare, without danger of subservience to local interests, or infringing the just rights of individual enterprise.

Opposition to these views, however, as we have already stated, quickly sprung up, which soon ripened into violent dissent.

At each meeting of the state society since the establishment of the journal, its suppression has been made an object of absorbing interest, and we have not failed on each occasion to hear of the preconcocted schemes and means by which this end was to be attained.

During the recent meeting of the medical society—with a very thin attendance—a majority of those present determined to alter the policy of the society's journal, and to entrust its whole conduct to one editor, who was to be adequately compensated for his services. To this arrangement the publishers objected, as it violated the society's contract with them, which stipulated that a corps of seven editors should be annually appointed by the society, and that the publishers should look only to the net proceeds of the journal for the payment of the debt due them.

In this state of things—the floor of the state society being made the arena of a semiannual conflict over the Stethoscope—the friends of this journal brought forward the proposition for its sale and severance from all connection with the society.

We refer the reader to the published proceedings, and especially to the report of the publishers, as to the financial condition of the journal.

It will be recollected, that the opposition harped upon the idea that the journal would saddle the society with a heavy debt. This was the effective argument in recruiting its ranks, and the staple of all their diatribes. Pictures were drawn of the lugubrious countenances which it was said would be pathognomonic of fellowship in the society, and all on account of the pressure of an indebtedness which would result in the destruction of the state medical organization.

Now, we have the happiness to assure the members that these frightful pictures have not been realized, and these sapient vaticinations have all been falsified. So far from entailing a debt upon the society, the journal has paid its own expenses, and about five hundred dollars of the debt contracted for its purchase.

We understand that its actual income has exceeded its ordinary cost of publication, in the sum of about eight hundred dollars. Five hundred dollars of this amount have been applied to the society's debts; the balance, about three hundred dollars, being required for extraordinary expenses, chiefly in execution of a contract which the former proprietor had entered into, for lithographs of all the presidents of the society, and from which the purchasers had no legal or moral right to fly.

In addition to this, there is still a considerable amount of arrearages due the Stethoscope, which, if by due diligence realized, would still farther diminish the debt of the society.

These statements are based upon the report of the publishers. We are gratified at being able to state, that some fellows of the society, who have looked upon the Stethoscope

with but little favor heretofore, became convinced that an auditing committee would be able to bring in a report still more favorable to the financial prosperity of the journal. This committee was appointed. We do not know the result of their labors. We hope that their expectations may be realized.

In this connection, we cannot forbear alluding to the pregnant fact, that as soon as the journal was ordered to be sold, some fellows, who gave it the cold shoulder when the organ of the society—nay more, exerted all their influence for its suppression—very promptly discovered that the journal was a very valuable piece of property!

We cannot forbear again to congratulate the members of the society on the signal failure of the doleful prophecies of the enemies of the Stethoscope. If any of them wear haggard countenances from the pressure of debt, these evils have *certainly* not been brought upon them by the Stethoscope.

We have felt it incumbent upon us to make these statements, in rendering a closing account of our stewardship.

The present editorial corps certainly do not mean to arrogate to themselves any credit for the prosperous condition of the society's journal. This is mainly due to the great liberality of the former proprietor—who, actuated by high motives of devotion to the interests of the state society and medical organization generally, disposed of it to the society on (to himself) the most self-sacrificing terms—as well as to the enterprising publishers, who, we are informed, have borne the pecuniary risk from the very commencement.

We cannot believe that those gentlemen ever were in earnest, who predicted such disastrous results to the treasury of the state society, and the private pockets of its members. This was only a species of harmless jockeying allowable at Tattersall's.

Neither are we sure that there ever was really any objection to the proposition per se of the medical society of Virginia owning an organ. We think, if occasion called for it, we could give good reasons to show that the real objection

did not lie against this substantive proposition. But under what influences was it to be conducted? Who to have charge of its editorial columns, and monthly access to its large number of subscribers? What its policy on the great questions of reform, which have been agitating the professional mind for several years past?

In the solution of these questions will be found the *gist* of the whole controversy about the Stethoscope. The present editorial corps was selected with reference to these questions.

The journal was built up originally, and its present list of subscribers obtained, mainly by virtue of its bold outspokening on these questions, and its earnest advocacy of thorough reform of the abuses and defects and inadequacies of our system of medical education.

We have endeavored to pursue the same line of policy. We have spoken freely and frequently on these subjects. In doing so, we have warmly espoused and defended those particular measures of reform which had received the sanction of the American medical association, and of the medical society of Virginia.

In searching for the causes of general professional deterioration and decadence, we could not fail to trace these evils to their true sources, viz: the medical colleges of the country.

We maturely and heartily endorse the sentiments and adopt the language of Prof. Cabell of the University of Virginia, who, in his report on medical education, declares, "that the most flagrant and mischievous of all the defects of American medical schools, the correction of which is essential to the attainment of much or any benefit from any other projected measure of reform, is the disgracefully low standard of professional knowledge and general mental culture exacted of the candidates for the degree of Doctor of Medicine."

Believing these things to be true, we have not hesitated to locate the responsibility where it of right belongs, and to proclaim the culpability of the guilty party. We earnestly desired to correct and remedy these evils, if possible, through the *agency of, and not above* the schools themselves. But

"hope long deferred sickens the heart;" and we are now satisfied that these abuses will never be corrected until the work is done over the heads and in spite of the schools.

We are willing to plead guilty to the charge of being agitators on these subjects. We have desired thorough and sifting investigation and discussion, that the truth might be elicited.

"There is none ever feared  
That the truth should be heard,  
But they whom the truth would indite."

We are satisfied that opposition to the Stethoscope has sprung up from its course on these subjects, and that this is the nucleus around which the elements of opposition have gathered. So far from being shaken as to the correctness of our positions, each succeeding year adds to their impregnability. We know the mass of the profession in this state is with us on these questions.

In taking leave of our kind readers—if there are any set of truths which we would more earnestly desire to fix in their minds than others, we would indite the following propositions:

1st. That all the evils which afflict the profession can be traced directly to the defective system of instruction adopted in our medical schools, and to the disloyalty and unfaithfulness of medical teachers to the crying behests of a noble calling.

2nd. That one licensed and diplomated quack is more dangerous to society and degrading to the profession than the whole tribe of outside mountebanks.

3rd. That the medical schools never will institute the needed medical reforms as long as they are controlled by lawyers and politicians and farmers, instead of medical men who have no interest in the business of teaching.

In conclusion, we will only add, that by the terms of sale, the purchaser of this journal will be bound to issue its numbers regularly until the first of next January.

### Medical Society of Virginia.

This society held its annual meeting on the 24th April, at the society's hall in the city of Richmond.

The attendance was extremely thin of both city and country members. The whole number present barely exceeded twenty, the number necessary to constitute a quorum, and it may be doubted whether a count would have always proved the presence of so large a body as this.

*Quack Medicines.*—The first business of importance taken up was the report of the committee on quack medicines. It will be recollected that the society about two years since sent a resolution to the American medical association, recommending the subjection of all popular secret nostrums to analysis by a competent chemist. This was found impracticable, and in lieu thereof the association recommended the passage of bills by the various state legislatures requiring the vendors of quack medicines to place upon every package a complete recipe for the composition, in English. This action was reported to the society at its next semiannual meeting. It was then fully endorsed, and a committee appointed to memorialize the legislature in accordance therewith.

The committee faithfully performed its duties, and presented an elaborate report to the society at its annual meeting held last year, which was laid over among unfinished business.

It was taken up at this meeting, adopted, and the committee instructed to prosecute their duties with renewed diligence.

On the following day, the society reconsidered its action, and decided that it was inexpedient to attempt to procure any legislative action on the subject. It was argued that the committee and the society would be exposed to odium and misrepresentation, and that the legislature would stand in too much dread of its constituency to pass such a bill—since the people are peculiarly fond of swallowing mixtures of whose composition they are ignorant, and they would consider the proposed action an abridgment of their rights.

It was replied, that no good object was ever accomplished without opposition and false representation; that what the people wanted was light and an awakened attention, and that there was sufficient good sense among them to perceive the propriety of legislative interference. As to the opposition of the press, its motives were exhibited in a most *transparent* manner by the chairman of the committee—holding up one of the Richmond papers, which had taken a prominent position in its denunciation of physicians for daring to intermeddle

with imported quackery. The paper exhibited had been despoiled of all its quack advertisements, and presented a most ridiculously mangled appearance—a fit ally to a party making the charge of interested selfishness against physicians.

*Stethoscope.*—The next business of importance was the election of editors to this journal. The members of last year's corps who were present declined re-election. It was then decided to appoint only one editor, with a salary. It was proposed that this salary be raised by an additional assessment upon the members of the society, which it was asserted would very cheerfully be paid—and this too in face of the fact that the present small assessment is collected with much difficulty, and the fact that the society had been assured that there was no reason to believe the *Stethoscope* would require any additional assessment for its support. This proposition not meeting with favor, it was proposed to ascertain how much the publishers would pay towards the salary of an editor, and a committee was appointed to make the enquiry. An editor was then elected, notwithstanding the remonstrances of members that the salary ought first to be settled before going into an election, since it would make a material difference in regard to nominations, and the action of that night might be reversed the next day. It was determined, however, to proceed with the election, and an editor was chosen.

On the following day it was ascertained that no salary could be raised.

The publishers, in accordance with their usual liberality, offered to take back the journal, and to become responsible for its entire debt.

At this stage of the proceeding it was discovered that the journal had become exceedingly valuable; that instead of its being a burden upon the society's treasury, it must become a source of revenue.

This was highly gratifying to the committee who effected the purchase—since the parties who made this discovery were the same who opposed the purchase, on the ground that it would involve the society in debt—nay, an elaborate calculation was introduced to show that the journal was worth double the amount paid by the committee.

It was then determined, with the consent of the editor, to offer the journal for sale.

Accordingly, a committee was appointed to hawk it about the streets for six hours, without advertisement, red flag or public crier and bell, and to report the terms of purchase offered by various individuals attracted by so advantageous a speculation.

To the amazement of the getters up of this notable scheme, the committee returned without having received a single bid, except that of the publishers.

It was then determined to offer this journal for sale at public auction, requiring *cash* for a sufficient amount to cover its entire debt, and giving a reasonable credit upon the balance.

A full report of the proceedings will be published in the next issue.

### Financial Condition of the Stethoscope.

RICHMOND, April 23d, 1855.

*To Drs. Atkinson, Haxall, Bolton, Lewis,  
Merritt and Wilson, Com'ee of Publication.*

GENTLEMEN—Below you will find a statement showing the condition of the financial operations of the Stethoscope from the first day of January 1854 (at which time the said journal became the property of the medical society of Virginia) up to the seventeenth of April 1855.

Dr. Gooch transferred the books of the Stethoscope, with all the debts due thereto, to the medical society of Virginia on the first day of January 1854, for the sum of two thousand five hundred dollars, of which there was due to Ritchie & Dunnivant two thousand dollars—the society giving their bond to Dr. Gooch for five hundred dollars.

It appears, as near as we can approximate, that there were seven hundred and thirty-three subscriptions due, at three dollars each, amounting to two thousand one hundred and ninety-nine dollars. There were seventy-seven of these subscriptions—a portion of which had been paid before Dr. Gooch sold the Stethoscope, and was omitted to be credited, and a portion received by him since—amounting to two hundred and thirty-one dollars.

This amount we have stated in the following account, as a just credit to be placed on the bond the medical society gave to Dr. Gooch for five hundred dollars, leaving due on that bond two hundred and sixty-nine dollars.

The amount that was due for advertising, and transferred to the society, has been settled by Dr. Gooch, for which he has rendered us no account; when that is done, the above bond should receive a still farther credit to that amount. It will be seen that that item does not appear in the following statement.

*Statement of Account.*

Debt assumed in the original purchase by the medical society of Virginia, due to Ritchie & Dunnivant, - - - - -	2,000 00
Debt due to Dr. Gooch by bond, - - - - -	500 00
Whole expense of publishing sixteen numbers of Stethoscope from January 1, 1854, to April 17, 1855, - - - - -	2,610 34
	<hr/>
	\$ 5,110 34
	<hr/>
By cash received by Ritchie & Dunnivant, for subscriptions and advertising to April 17, 1855, - - - - -	2,860 68
Collected and settled by Dr. Gooch, - - - - -	231 00
	<hr/>
	3,091 68
Amount due Ritchie & Dunnivant, - - - - -	1,749 66
“ “ Dr. Gooch on bond, - - - - -	269 00
	<hr/>
	\$ 5,110 34
	<hr/>

It will be seen by the foregoing statement, that the Stethoscope has, in sixteen months, reduced its indebtedness from two thousand five hundred dollars to two thousand and eighteen dollars and sixty-six cents, having paid four hundred and eighty-one dollars and thirty-four cents of its original debt. It must be recollected that the expense of the publication has been increased, since it became the property of the society, much above its previous cost. This occurred from the following causes, viz: The society have had many extra copies of the Stethoscope printed for gratuitous circulation; and in addition to this, the portraits of all the presidents of the society have been lithographed for the work, and some extra clerk hire has been paid. Those items have cost four hundred dollars. As it is not likely that this expense will occur again, it is reasonable to deduct that sum from its present indebtedness, to show what would now have been the pecuniary situation of the Stethoscope. Its indebtedness now being two thousand and eighteen dollars and thirty-four cents, deduct the four hundred, and its indebtedness would be one thousand six hundred and eighteen dollars and thirty-four cents, showing a profit of eight hundred and eighty-one dollars and sixty-six cents in sixteen months.

Dr. Gooch transferred to the society seven hundred and

thirty-three subscribers, with a debt due by them to the Stethoscope of two thousand one hundred and ninety-nine dollars. There will be in cash, and debts due, on the 1st of January 1856, after deducting the expense of completing the fifth volume, of two thousand five hundred dollars—which amount we consider as perfectly good—having made a deduction of three hundred and fifty dollars for bad debts and contingent expenses, (which we consider a very liberal one,) as the subscription list is confined to the *medical faculty*.

Being desirous to give the society all the information that is in our possession as to the future prospects of the Stethoscope, we will here state that there are now seven hundred and fifty-six *paying subscribers*—which subscription will amount to two thousand two hundred and sixty-eight dollars per annum, while the publication of the journal hereafter will not exceed (if judiciously managed) more than one hundred and ten dollars per month, or one thousand three hundred and twenty dollars per annum—thus leaving a clear profit to the society of nine hundred and forty-eight dollars, to say nothing of the profits from advertisements, or the *probable* increase of its circulation.

We wish the society to bear in mind, that by referring to the articles of agreement between the committee of publication and ourselves, published in the March number of the Stethoscope of 1854, it will be seen that we do not hold the medical society of Virginia bound to us, either *legally or morally*, to pay us any portion of the debt due us for the publication of the said journal, as we agreed, in the presence of the society, and afterwards incorporated it into the articles of agreement, that we looked to the receipts of the Stethoscope for the liquidation of our claim. See Articles of Agreement, published in the Stethoscope, vol. 4, No. 5, p. 309, § 4.

All of which is respectfully submitted, by

RITCHIE & DUNNAVANT.

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### Varicose Veins and their Treatment.

This operation has for its aim the obliteration of the varicose veins by flattening them crosswise, and inflaming the walls both inside and out. The illustrious surgeon of Montpellier thought that the obliteration was caused by an effusion of coagulable lymph, and of pseudo membranous formation.

We believe here in pure adhesive inflammation, which would be of secondary importance if the method was good. The following is the method of proceeding:

The patient being laid horizontally, a transverse perpendicular plait is taken in the tissues in the direction of the varicose vein. The plait is then opened by a single incision to the base; this forms an incision an inch long, parallel with the vein, around which you dissect with great care. A strip of lint half an inch in width, and two inches in length, is then passed under it, and the ends are secured on each lip of the wound by means of adhesive straps.

The wound thus dressed soon suppurates; the dissected vessel, sustained by the lint, becomes red and covered with healthy granulations, and is finally entirely obliterated. The lint is then withdrawn without difficulty. (They do not say after what length of time.)

As soon as the lint no longer supports the vein it forms itself into a solid bridge, which eventually disappears. By the tenth day the wound is cicatrized, and the vein hid under the cicatrix. According to the author of the dissertation, this method has the advantage of producing a *phlebite*, which is as much to be dreaded in this as in any other operation of ancient surgery, and we are a little incredulous on the point of ten days being sufficient for the whole treatment.

M. Gaspard adds, that he has witnessed at *l'Hospital Saint Eloi*, several very curious observations, but he does not relate any, and contents himself with telling the history of an operation for varicocele, which was cured, but without throwing much light upon the method. There is nothing said of the accidents, results, drawbacks, or number of operations. It is distressing that such incomplete documents should be so common in the annals of science. Besides, we know that at Montpellier even, the method of Delpach has not survived its creator.

*Temporary Ligature.*—The ligature can cause the obliteration of the vein without the division of its walls, and by a process analogous to the preceding method. That is to say, by inflaming the cellular tissue which surrounds the vessel, by provoking an exterior *phlebite*, which spreads to the interior, brings on adhesion of the walls, and undoubtedly also the formation of hard clots of blood.

If the ligature is very light, the coats of the vessel are plaited and partially in contact, and the *phlebite* is undoubtedly rendered easier. I have often repeated on the dead body the ligation of the thick coated veins, as the saphena, the superficial veins of the arm, and the deep seated

abdominal veins, and have distinctly seen the thread divide the middle coat only, the inner and the outer coats resisting very well the most energetic compression. The result is opposed to what the classic authors say, and proves most incontrovertibly that the *integrity* of the venous wall depends very much on the ligature: it is very probable that if the same operation be made on enlarged varicose veins, the disorder must be greater. I can understand then very well how the thread tightly drawn and left in place even for a very short time, can destroy the vein.

M. Davat, in his practice, had already seen obliteration produced without division of the vessel. A vein was tied moderately tight with an india-rubber ribbon, and the wound reunited. On the nineteenth day an abscess formed, upon opening which the india-rubber ribbon was found floating in the suppurative matter; the vein was thickened, but not divided; the foreign body was removed and the wound healed, but the vein remained impermeable.

The experiment was, I believe, made on an animal, but the temporary ligature has also been applied to man.

*Method of Freer of Birmingham.*—This method consists in binding the vein tightly with a thread. According to the remark of Hodgson, when a vein is tied by a thin ligature, the internal coat of the vessel is lacerated, inflammation follows, and if the opposite walls of the tube are kept in contact by the compression, then adhesion is obtained very quickly.

The operation in itself is, therefore, similar to other methods of obliterating the arteries by breaking the inner coat, and without leaving the foreign body in contact with the vascular tube.

This method has been, to my knowledge, very rarely employed. We find a detailed account of it in Hodgson's work, communicated by Freer of Birmingham, which we give below. The case was that of

"A woman, aged fifty years. Had an inveterate ulcer on the right leg, above the tibia-tarsal articulation—veins of the leg and foot varicose. A ligature was applied to the internal saphena vein a little below the knee. Four hours after there was violent pain in the left side of the chest, breathing frequent and laborious, difficulty in speaking, and vomiting of blood. There was no pain, however, in the leg. Pulse 60. Took fourteen ounces of blood; symptoms better, but reappeared, more aggravated, in four hours after. Ligature removed, the symptoms decreased immediately; the pulse rose again; another vomiting of blood, and palpitations.

"On the fourth day, pain and swelling of the knee, which

disappeared on the 6th; cure of the ulcer and wound from the ligature on the 15th, but in a vertical position the veins had become enlarged, and the limb painful. On the 18th day the limb became very painful; the veins which had been tied appeared hard and impermeable; there was much tumefaction around the vessels which surround the articulation of the foot, and the patient complained of great pain.

"This first attempt was of a nature to render great care necessary in the treatment; however, at the end of six weeks, they ligated a large vein, situated above the external part of the articulation of the foot; the ligature was removed at once. Febrile symptoms soon appeared, with vomitings. Fourteen ounces of blood was taken. The vein of the arm undoubtedly commenced inflaming, for the limb became painful. There was retention of urine—bladder evacuated by means of catheter. Retention again next day, with spontaneous evacuation in the evening.

"The operations had to all appearance brought on the obliteration of the tied vessels. Notwithstanding, it was thought proper to make two new ligatures, which were taken off immediately. This time the results were still more formidable; vomiting, streaked with blood, was first observed, a full quick pulse, and retention of urine; then the pulse became almost imperceptible; delirium, and painful vomiting; these alarming symptoms continued for three or four days. On the 17th day the general health of the patient was somewhat improved, and the incisions had entirely healed. During this time she had been bled three times, losing thirty-two ounces in all."

We do not know which to admire most, the courage, patience or daring of the surgeon, who had so many dangerous symptoms to combat.

The treatment lasted about two months and a half; but it appears to have been very successful, for it is said that two years afterwards the patient walked nine miles to see her surgeon, and that she did not experience the least inconvenience from her old affection.

This happy result must be attributed to the facility with which inflammation was brought on, and because the disease was followed by the surgeon from point to point. But as the venous system is not equally susceptible in all patients, this method would probably prove useless, because the constriction of the vein, however slightly prolonged, would seldom bring on the obliteration. Besides, it is necessity which has in some measure carried this mode of operation, which theory and knowledge of what takes place in the other methods of obliteration makes us regard as totally insufficient, and incapable of being generalized.

*Method of M. Wise.*—"This author recommends the temporary ligature; he has observed that the clot forms itself at the end of forty-two hours. He employs a slipknot. He removes the ligature sixty-six hours after its application. It seems to me (adds Lisfranc) that this is sufficient time to produce phlebitis; I think to extract it, the cicatrice, if any exist, must be torn; I think they must rub the already irritated vein. Here are causes capable of bringing about the accident which should be avoided. This method, it appears to me, is bad."

*Remarks.*—The methods of temporary ligature are now forgotten; I shall not be long discussing them; they all have the fault of affecting the integument, since a previous incision is necessary in order to discover the vessel. The wound could, in reality, be healed by the first intention; but if, as in the case of M. Davat, the contracting bandage is left in place, either the adhesion will fail, or the wound will at length become the seat of abscess; for all hopes of the absorption of the ligature must be given up, whatever their nature may be. If, on the contrary, the ligature is taken off immediately after the compression, as did Freer, or even sixty-six hours later, as M. Wise recommends, we have good reason to fear that the blood will again find its way through the vein.

These different methods are, in reality, less dangerous than that of Delpach; but they inspire but little confidence. I think, therefore, that they should be given up.—*Dr. Verneuil, Professeur agrege de la Faculte ancien Prosecteur.*—*Philadelphia Medical and Surgical Journal.*

### A Surgical Operation under the influence of Local Anæsthesia induced by Cold.

BY L. A. DOUGAS, M. D. &c.

About 18 months ago, Mr. J. B. of Greene county, perceived a warty growth upon his right arm, over the insertion of the deltoid muscle. Observing that it was increasing in size, he endeavored to destroy it by the application of a silk ligature around its base. This, however, only aggravated the case, and the growth was shaved off by his medical adviser, who then applied ineffectually various agents to prevent its return. Every application, apparently, served only to add to the rapidity with which the disease extended and assumed the character of an epithelial, carcinomatous fungus. The patient subsequently placed himself under several individuals,

particularly celebrated as "cancer doctors;" the fungus was repeatedly removed more or less completely by means of the escharotics in common use; but would always return with renewed activity.

On the 2d instant, Mr. B. arrived here, and I found him in the following condition: The fungous growth was about the size of two fists, somewhat globular, with a flattened surface and projecting a little beyond the circumference of the attachment, so as to constitute this a neck of about four inches in diameter. The entire surface of the tumor presented the aspect of a ragged, mucous membrane or ulcer, from which there exuded an abundant discharge of the most fetid seropurulent matter. The fetor was such indeed as to infect the whole apartment, to the very great annoyance of the patient and all who came about him. Around the attachment the skin was swollen, red, and evidently yielding to farther encroachments. The axillary glands were enlarged and tender to the touch. The patient's general health was much impaired, from incessant pain, despondency, and, above all, the intolerable stench which destroyed his appetite and kept him more or less nauseated. He urgently solicited the removal of the fungus and was willing even to suffer amputation, if deemed necessary.

In view of the patient's age, his cachectic condition, the doubtful advantage of the operation, &c. amputation was deemed unadvisable, and the simple extirpation of the offending mass was determined upon. From the extent of skin to be necessarily removed, it was evident that the edges of the wound could not be brought in contact after the operation. Yet there was no alternative, and this circumstance having been explained to the patient, as well as the probability that the disease would return soon or late, he very readily consented to the excision.

This was a case in which the administration of anæsthetics by inhalation could not have been carried very far without risk, and it was one remarkably well adapted to the use of a freezing mixture for the production of local anæsthesia. Prof. Means was therefore requested to prepare the usual frigorific compound of ice and salt and to superintend its application. This was done in presence of the medical class, and in less than four minutes the surface was congealed and the operation immediately performed; a double elliptical incision being carried through the integuments from the acromion process to within three inches of the elbow, and the parts included rapidly dissected away down to the muscles. Under this extensive flaying the patient experienced so little pain that he

now declares that the most unpleasant part of the operation was the dressing, or rather the application of the adhesive strips.

The congelation was so complete as to have solidified the adipose matter to such a degree that the knife felt as if passing through a mass of tallow. Not only was the surface blanched, but we have reason to believe that the effect of the application very materially lessened the amount of hæmorrhage, in as much as this did not exceed a gill, whereas we had expected it to be very profuse. Ligatures were applied to three small vessels, although they bled very little, because it was deemed important to prevent even a small loss of blood under the circumstances. We regard this case as fully demonstrating the value of Arnott's plan of inducing local anæsthesia. It is now seven days since the operation was performed, and the patient's spirits, as well as general health, have so much improved as to allow him to return home. The wound seems to be doing remarkably well.—*South. Med. & Sur. Jour.*

*Augusta, 9th Jan. 1855.*

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### **New Method of inducing Premature Delivery.**

Dr. Scanzoni was induced, by observing the active sympathy between the breasts and the other parts of the sexual apparatus, to try to produce premature delivery by irritating the nerves of the mammary glands. The first experiment was made upon a young woman, aged 24, who, two years ago, had been delivered by perforation, in consequence of contraction of the pelvis. In the thirty-second week of utero-gestation, apparatus constructed of caoutchouc, forming sucking-pumps, were put upon the nipples. During three days they were used about seven times, the process going on upon each occasion for two hours. After the third application, the neck of the uterus became shortened; after the sixth, severe labor-pains came on; after the seventh, the child was born.

The only danger likely to ensue from this very simple method of treatment is inflammation of the mammæ; this can be met with proper treatment.

A second case, of similar kind, occurred to the author. A young woman, *enceinte* for the first time, suffered so severely from dyspnœa, connected with organic disease of the chest, that premature delivery was necessary for the preservation of

her life. After the third application of the sucking-pumps, an apparently dead child was born; respiration, however, was soon re-established. The author remarks that this case is not quite conclusive, because premature delivery occurs often in connection with severe dyspnœa, independent of other influences.—*Med. Times and Gazette, from Verhandl. der Med. Phys. Ges. zu Würzburg.*

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### Progress of Medical Science.

*Absence of Chlorides from the Urine, Diagnostic of the Onward Progress of Pneumonia.*—In the April number of the Monthly Journal of Medical Sciences, Prof. Bennett gave an account of certain facts which confirmed the statements of Simon, Redtenbacher, Beale, and others, as to the absence of chlorides in the urine during the onward progress of pneumonia. The professor resumed these enquiries on returning to the clinical wards of the Edinburg hospital last summer, and in the number of the above mentioned journal for December last, he relates three cases of the disease there treated which confirm the diagnostic value of this change in the urine. In all these cases the absence of chlorides marked precisely the onward march of the pneumonia, whilst their presence indicated its cessation and was generally accompanied by the returning crepitation and commencing absorption of the exudition.

*New Remedy for Pruritus Vulvæ.*—Dr. Sholtz recommends an Indian plant, the caladium seguinum, which is used by the natives of India as an anaphrodisiac, for the treatment of those cases of this most distressing malady, which are due rather to a hyperæsthetic condition of the parts, than to any lesions of the mucous membrane of the vulva. The plants belong to the aroideæ. Scholz has used it with great success in two cases which had previously resisted all remedies; and he administered it in the form of an alcoholic tincture in doses of six drops.—*Arch Gén. de Méd.*

*Anaphrodisiac Properties of Bromide of Potassium.*—Thielmann recommends this remedy as an excellent anaphrodisiac in satyriasis, in the frequent and painful erections during gonorrhœa, in spermatorrhœa, and in nymphomania. He administers it in doses of from 2 to 3 grs. every two or three hours; and, at the same time enjoins a mixed vegetable and milk diet, and forbids all acid substances.—*Med. Zeit. Russl.*

*Sulphate of Quinine in Phthisis.*—D. Muntendam, a Dutch physician, has just published a paper to show that, from his experience in twenty-two cases, sulphate of quinine, given along with acetate of morphia, or even alone, is capable of prolonging the life of the patient in many cases of phthisis, and that it may even effect a cure in those cases in which a tubercular deposition has just commenced, especially in married women and children. He alleges that, when given continuously in small doses, it does not cause dyspnœa, diarrhœa, headache, or any disagreeable effects; and he believes that in very many, but not in all cases of phthisis, it should be ranked as one of the best remedies for the disease.

*Mon. Journ. Med. Sci.*

*Borax Injections in Infantile Diarrhœa.*—M. Bouchut considers infantile diarrhœa to be of two kinds; the one, symptomatic of lesions of the intestinal mucous membrane; the other, idiopathic, a nervous or catarrhal flux from the great intestine, which may occasion death, without leaving any material morbid appearances. In the latter variety, M. Bouchut recommends clysters containing the bi-borate of soda, as peculiarly efficacious. This remedy proves as beneficial as it does in aphthæ of the mouth, it acts as a weak astringent on the intestinal mucous membrane, and as an alkali in neutralizing the acid secretions poured out by it, which lead secondarily to ulceration of the bowels, and especially of the anus.

He uses clysters containing from 10 to 20 grammes of the salt, in 125 grammes of water.

In cases of infantile diarrhœa symptomatic of intestinal ulcerations, M. Bouchut has found benefit from the use of borax, administered internally in the dose of 2 grammes, in 80 grammes of a mucilaginous emulsion.—*Gaz. des Hôpitaux.*

*Trial of Phosphorus in Paraplegia.*—Prof. Bennett has given phosphorus in seven cases of paraplegia from disease of the spinal cord, in the form of phosphuretted oil (4 grs. of phosphorus dissolved in  $\frac{3}{4}$  of olive oil.) In none of these cases has he been able to satisfy himself that any improvement was occasioned. He commenced with three drops a day, which were afterwards cautiously increased to ten, and in one case to fifteen drops. But these large doses soon induced violent nausea and vomiting, and, after a short suspension of the remedy, he continued it in doses of three drops.

In the case of chronic myelitis, which took ten and fifteen drops, the phosphorus was excreted by the lungs, as the breath smelt strongly of the drug, but was not phosphorescent

at night—a phenomenon which has been seen by some physicians who have employed it. In another case, that of a delicate woman, with probably congestion of the cord, a large amount of phosphate was passed in the urine presenting, under the microscope, beautiful feathery crystals. The dose of the oil, therapeutically, ought never to exceed five drops, and even this amount cannot be administered for any length of time without deranging the stomach.

*Monthly Journ. Med. Sci.*

*Therapeutic Action of Lupulin.*—Debout's observation on the favorable influence of lupulin in quieting painful erections induced Dr. Zambuco to institute some experiments with the medicine, which, to prevent mistakes, he administered to the patients with his own hands. The form was threefold; pure lupulin, the tincture, or mixed with an equal part of sugar. The doses were different: of pure lupulin, 1—16 scruples (these high doses caused no disturbance of the nervous system;) the tincture, 2—16; the mixture with sugar, 2—3. From eight well marked cases of painful erection, consequent on gonorrhœa, out of a much larger number, the author was enabled to draw the following conclusions: Lupulin possesses a remarkable effect upon the genital organs; the erethisms were quieted in four-fifths of the cases. It is of therapeutic utility when there exists the necessity for keeping the penis in a state of rest. Camphor, given in large doses, with a similar object, both irritates the alimentary canal, and often fails in its end. The sedative and antibleorrhagic influence of lupulin depends upon a resinous, æthero-oily principle; while the bitter principle yields a real tonic. The author has seen lupulin given with good effect in scrofula.

*Med. Times and Gaz.*

*On the Use of Glycerine as an Internal Remedy.*—By J. L. Crawcour, M. D. of New Orleans.—I wish to draw attention particularly at present to the special action of glycerine on the economy, and the perfect safety with which it can be used as an internal remedy. For the past twelve months I have used it in every case of disease where formerly I should have used cod liver oil, and with superior benefit; for while it seems to possess all the remedial virtues of this latter agent, it is its superior in taste, in not disordering the digestion, and in its property of combining with any other remedy.

In several cases of phthisis, of scrofulous disease generally, in mesenteric disease in children, I have used it largely and successfully; and in children, its sweet and agreeable taste

gives it a great advantage over cod liver oil, the only agent I can compare it with in its therapeutic action. In addition to its antistrumous property, I find that it materially aids in the assimilation of salts of iron, especially of the iodide, and I now rarely order either iodine, or the iodide of iron, without combining them with glycerine. Quinine also is soluble in it, without the aid of sulphuric acid, and to some slight extent is divested of its bitterness.

The dose in which I usually administer it is from one to three drachms three times daily, in an ounce of water; in from one to two drachms, it in a short period relieves the cough, improves the digestive powers, and appears to increase the fat producing principle in phthisical patients; in larger doses it has in a few instances produced nausea; it is, however, essentially necessary to its successful employment that it be obtained pure, and this is a matter of some difficulty, for it is ordinarily the result of the preparation of the common lead plaster, and consequently contains traces of lead, but by the process of Dr. Morfit, who decomposes lard or oil with hydrate of lime, it can be procured chemically pure, and at a very cheap rate. Should my communication induce other physicians to try it, the purpose of my writing to you will be answered, as it will be an equal boon to the physician and patient, if a remedy can be discovered equal in properties to cod liver oil, and without its nauseous taste and smell.

I have recently tried it as a solvent for phosphorus, which latter we have hitherto hardly been able to use in medicine, as its solution in oil is so nauseous that we can rarely induce patients to swallow it, and its solution in ether is so dangerous that I question whether any physician of ordinary prudence would prescribe it. But in glycerine, it is not only nearly as soluble as in oil, but is miscible with water in all proportions, and is comparatively tasteless and odorless. About two grains dissolve readily in an ounce of boiling glycerine, and from experiments on myself, I consider it a powerful and a valuable stimulant. Of the above solution, which, after the nomenclature of Messrs. Cap and Garot, I would call the glycerole of phosphorus, I took one drachm in a wineglassful of water, with which it intimately blended; there was hardly any taste or smell, and it did not produce those garlicky eructations said to be the result of the phosphorous in oil. Its effect on my system was that of a stimulant: in about half an hour the pulse became quickened both at the wrist and at the temples, the cheeks flushed, the skin became warm and suffused with moisture; there was a certain amount of mental excitement, and after a short time there occurred a feeling of

oppression at the præcordia, accompanied by palpitation of the heart, while after a certain time the cerebral excitement was followed by a slight feeling of confusion accompanied by sleeplessness. Each time that it has been taken in this dose, it has, on myself, produced these same effects. I therefore look upon this quantity as excessive, and would suggest that if this remedy be used, it should be in doses ranging from ten to thirty minims. It may be combined with any other drug, and I look upon it as a valuable addition to our list of therapeutic agents; not that the use of phosphorus is new, but hitherto it has been excluded from us from the difficulty of finding a proper solvent—this now, I believe, has been discovered in glycerine.—*New Orleans Medical News and Hospital Gazette.*

*Cancer successfully Treated by External Application of Caustic.*—Dr. J. D. Gillespie related the following case to the medico-chirurgical society of Edinburgh:

A gentleman, aged seventy-nine years, of a large robust frame, in 1847 received a slight abrasion of the heel, which speedily cicatrized, but the cicatrix soon after gave way and ulcerated. The ulcer dried up and left a hard warty substance in its place, which continued to increase. In 1851, it had assumed the appearance of a hard cancerous growth, fully half an inch in depth. By the advice of Mr. Syme, caustic was applied. Erythema of the leg soon after set in and reached as far as the groin, and the tumor increased in size. A second attack of erythema occurred a few weeks after. The tumor continued to increase in size; the glands in the groin became enlarged; the general health began to be impaired, and the mental faculties were affected. It was in October 1851, that caustic had been first applied; the tumor was then the size of a walnut, spongy, and occasionally bleeding. Chloride of zinc was had recourse to, and the tumor came away, but after cicatrization had commenced, the tumor reappeared. The application was continued for a year with similar results, repeated hemorrhages took place, and the glands in the groin were permanently enlarged. Potassa fusa was applied on three different occasions, but the chloride of zinc was decidedly more efficacious. On September 18, a year after the first application, chloride of zinc was tried for the twentieth time, and the tumor to the extent of three inches was destroyed; a part of the os calcis exfoliated. Two years have now elapsed, and there had been no tendency to reproduction. Dr. Gillespie considered the case interesting, as it was just such a one which was occasionally

vaunted by some quack as a victory gained over modern surgery, and this one certainly explained their so-called cures, and at the same time it was fraught with caution to the surgeon not to lose an opportunity of giving similar cases a trial with the caustic before dooming them irrevocably to the knife.

Professor Miller referred to cases of soft cancer of the breast where a cure was sometimes obtained by the diseased product sloughing *en masse*. He could corroborate the statement of Dr. Gillespie with reference to the efficacy of the chloride of zinc; as a caustic it was thorough, and easily kept under command.—*Monthly Journal of Medicine*.

*Nickel*.—Professor Simpson has been experimenting upon the therapeutic properties of nickel, and announces that the sulphate of nickel possesses tonic properties, and that it may be occasionally employed with advantage as a substitute for iron or manganese. In doses of half a grain thrice daily this salt is found very efficacious. In larger quantities it occasions nausea and vomiting. Dr. Simpson reports a case of periodical cephalalgia which yielded to this agent after salts of iron and manganese had failed; and he also mentions the cure of a woman who had suffered from amenorrhœa for ten years, but who recovered promptly under the administration of sulphate of nickel.

*Radical Cure of Hernia by Injections of Iodine*.—M. Jobert lately presented to the academy of medicine three cases of inguinal hernia in which this new mode of treatment had been productive of the best results.

The first case was that of a young man, 18 years old, with complete inguinal hernia of the left side, which, though it did not interfere with his ordinary avocations, rendered him ineligible for the military service. The tumor did not descend to the bottom of the scrotum, and it was separated from the testis by a constricting band. It was easily reducible by taxis, but reappeared upon the patient coughing or assuming the erect posture.

At the patient's request M. Jobert performed the following operation on the 12th May. An incision, 2 centim. in length, having been made over the inguinal canal, a fine trocar was introduced into the sac, through which 5 grammes of pure tincture of iodine were injected. The wound was then closed by means of twisted sutures, and dressed with simple ointment. The patient suffered almost no pain. In the evening there was slight tumefaction and pain of the inguinal region, but no fever or constitutional disturbance.

May 14.—The swelling and redness were considerable. The sutures were removed, and the wound was found imperfectly healed.

In a few days the external wound cicatrized, and the swelling and redness disappeared. The left testicle was not atrophied. On 5th June the patient was able to go about, and to cough without the least inconvenience or reappearance of the tumor. As a precautionary measure he continued to wear a suspensory bandage for some time.

The second case was that of a patient, æt. 34, who entered the Hotel Dieu on the 18th Nov. 1853, having not only a congenital inguinal hernia, but also a hydrocele of the same side. These were separated from each other by an annular constriction of the tunica vaginalis, which contained the protruded bowel above, and the testicle and sermo fluid below. M. Jobert resolved to obliterate the tunica vaginalis, for the purpose of curing both the hydrocele and the hernia at the same time. He accordingly passed a trocar obliquely into the lower portion of the constricted sac, and evacuated the serosity therein contained; and then, having previously made pressure with the finger over the inguinal canal to prevent the possibility of there being any communication between the tunica vaginalis and the peritoneum, he injected some tincture of iodine into the tunica vaginalis and the hernial sac. The external wound was finally closed by adhesive plaster. Next day the scrotum was reddened, somewhat tender to touch, and distended with fluid effused from the tunica vaginalis; but there was no pain or constitutional disturbance. On the 5th Dec. the swelling, which had been gradually subsiding, had nearly disappeared; and on the 12th the scrotum had regained its normal size. The scrotum and the spermatic cord on the affected side were firmer than before; and a cylindrical cord extended along the whole of the inguinal canal, as well as along the spermatic vessels down to the testicle. The patient was completely cured, and he left the hospital able to walk easily and without fatigue, and without any reappearance of the hernial tumor.

The third case occurred in a young man, aged 27, who had had a large oblique inguinal hernia of the left side for eight years, for which he had worn all sorts of trusses without benefit. At the desire of the patient, and after a consultation with his colleagues, MM. Rayer, Begin, and Cloquet, M. Jobert punctured the hernial sac, and injected the tincture of iodine into the tunica vaginalis. The patient was laid in the horizontal posture after the operation; his legs were flexed on his thighs, and maintained in this position by means of a

bolster. The hernial sac swelled immediately after the injection, and in fifteen hours it was as large as the hernial tumor, and had a fluctuating, half solid feeling. The parts continued thus for eight days, and then the swelling speedily diminished. On the twenty-eighth day after the operation the cure was complete; the track of the spermatic cord was occupied by a hard and compact cylindrical substance, which completely prevented any return of the hernial protrusion, and allowed the patient to go about without any recurrence of his malady. Four months had elapsed at the time when M. Jobert related his case, and the cure was still as complete as at first; the inguinal canal was filled with a hard, solid cord; and there was no atrophy of the testicle.

*Remarks.*—When the sac is adherent to the surrounding parts—when the hernia is congenital—when the sac is distended with fluid, or is thickened or cartilaginous—M. Jobert recommends puncturing the sac at once with a trocar, without previously making an incision. The trocar is to be inserted perpendicularly at first, then obliquely upwards, and, when it has reached a certain depth, it is to be directed cautiously backwards so as to puncture the sac—the accomplishment of which process is known by the operator no longer meeting with resistance, and by his feeling the canula move about without obstruction in the empty sac. Having entered the sac, the pure tincture of iodine should be injected into it by means of a glass syringe—whereby we may be able to know how much fluid has been used. M. Jobert ordinarily injects one or two spoonsful (*cuillerées*) of the tincture, but often much less. The quantity injected should always be in proportion to the size of the serous pouch. The injection should be suspended whenever we feel an obstacle to the entrance of the liquid. Instead of allowing the fluid to escape through the canula, M. Jobert withdraws it by means of the suction of the syringe.

When the sac is thin, movable, and easily displaced, Jobert exposes it by dividing the integuments with a bistoury, and *thereafter* punctures it with the trocar—*never with the knife*. In such cases he unites the lips of the external wound by means of twisted sutures.

What occurs after the operation. Immediately after the injected fluid is withdrawn, a new liquid begins to be thrown out within the hernial sac. After twenty-four or forty-eight hours have elapsed, the sac is filled with this fluid; it continues in this state for eight days, and after the first week it begins to diminish gradually and visibly in bulk. In proportion as the tumor diminishes it begins to acquire solidity, and

becomes as firm as wood ; nay, it eventually becomes as hard as bone or ivory.

M. Jobert affirms that this method by injection is superior to all the other operative procedures which have yet been devised for the radical cure of hernia, inasmuch as it is at once simple and harmless. M. Jobert, in conclusion, acknowledges that this operation is not invented, but merely revived, by him ; inasmuch as M. Velpeau, in his *Annales de Chirurgie*, published ten years ago, first suggested the likelihood of injections of iodine proving beneficial for the radical cure of reducible hernia.—*Month. Journ. of Med. Sci.*

*Anæsthetic Uses of Severe Cold.*—As patients now expect to have every operation performed without pain, both they and their surgeons will be glad to have an easy and agreeable means of accomplishing this, in all the common operations, unaccompanied with the dangers of chloroform. What can be less troublesome in opening an abscess, for instance, or making a cutaneous incision, than touching the skin for a moment with a brass ball that has been immersed for a few minutes in ice and salt, or a thin spoon filled with such a mixture ? It is true, that in deep-seated operations such a means can only suspend the sensibility of the skin ; but it is the incision of the skin which constitutes the most painful part of every operation ; and if this be benumbed, a smaller, and consequently less hazardous dose of ether or chloroform than has usually been administered, would be enough to remove the sensibility of the other tissues. These deep-seated operations, however, constitute a small minority, and if the list of recorded deaths from etherization be referred to (now amounting to more than fifty) it will be found that in three-fourths of the number, complete anæsthesia might have been produced with perfect safety by cold.

M. Velpeau, who introduced anæsthesia from cold into France, has, in a lecture on the subject recently reported in the *Gazette des Hospitaux*, expressed the doubt, whether in some operations, the hardening of tissues might not prevent their being cut with ease. I have not found this to be the case, nor does he himself allude to this disadvantage, when, in his work on diseases of the breast, he mentions that he has excised tumors after anæsthesia from cold.

The fear of reaction I have already adverted to in the pre-fatory observations. Instead of reaction being produced, the anæsthetic is a preventive of inflammation from the wound ; and were it used for this purpose alone, it would be invaluable.

*Edinburgh Monthly Jour. of Med. Science.*

*On the value of the treatment of Orchitis by Collodion.*—By M. Ricord.—Thirty-eight patients have been treated, under M. Ricord, by elastic collodion, according to the rules established by M. Bonnafont. The pain produced by the application of this substance lasted from six minutes to a quarter of an hour. The greater number of patients felt easy from that time, but others experienced a recurrence during the course of the day. One of them complained of most acute suffering. The inflammatory pain diminished in some, and ceased in others, without any sensible influence from the collodion: in a certain number of cases the pain was sensibly augmented. In none of the patients treated in this way had M. Ricord to relate the miraculously rapid cure announced by M. Bonnafont. After twenty-four hours the tumor had not sensibly diminished in volume; it presented, in the majority of cases, the diminution of one-third of an inch after forty-eight hours; then the diminution continued to operate gradually and progressively. The mean duration of the malady in the cases treated by collodion, was seventeen to eighteen days. At the same time, eleven patients, also affected by blennorrhagic epididymitis, were treated by repose, strict regimen, and topical cold. The inflammatory pain disappeared promptly, and the diameter of the tumor was sensibly diminished at the end of thirty-two hours. The mean duration of the malady was fifteen to eighteen days. A third series of patients was treated by compression by strapping. Here the symptoms disappeared more rapidly than in the preceding plans. The mean duration of treatment was fifteen days. One patient was discharged cured in six days. M. Ricord believes that elastic collodion does not cause such suffering as the ordinary collodion, but that it is a more painful mode of treatment than others. M. Velpeau believes that collodion does not shorten the duration of orchitis; it sometimes diminishes the pain; on other occasions it increases it; it irritates the skin; often excites suppurations, which are tedious and inconvenient. M. Bonnafont has explained his success upon the fact of his having treated his cases at the very outset, a circumstance quite possible in a military hospital.—*Rev. Med. Chir.*

*On the treatment of Puerperal Peritonitis by large doses of Opium.*—Prof. Clark has communicated to the new American edition of Ramsbotham's System of Obstetrics, his experience in the treatment of puerperal fever by opium, at Bellevue hospital, N. Y. Following the relation of one case and a reference to several others, he concludes:

In reviewing the cases, of which an outline is given above, I think the following conclusions are justifiable:

1st. When a prominent element in "puerperal fever" is peritonitis, the treatment with large doses of opium is more successful than any other that has yet been proposed.

2nd. To be successful, this treatment must be commenced early, and the patient must be brought under its influence as rapidly as the susceptibility of the system can be ascertained by trial.

3rd. The quantity of opium required to produce a safe but desirable degree of narcotism, varies greatly in different cases; so that it is necessary to begin with doses that cannot do mischief, and increase every two hours till the influence of the opiate is sufficiently decided.

4th. Every dose, during at least the whole tentative period, should be administered by the physician himself, or by some person on whose knowledge of the effects of opium and whose watchfulness and discretion he can rely. Some young physicians are too bold, and endanger the life of the patient; others are too timid, and do not control the disease.

5th. The opium treatment alone will not cure "puerperal fever," when its leading element is purulent metritis, though there is reason to believe that it will control, and even prevent the peritonitis which generally accompanies it. This conclusion has been confirmed by recent observations.

6th. The tolerance of opium in some cases of puerperal peritonitis almost surpasses belief. Yet in private practice I have not found more than half or two-thirds of a grain of sulph. morph., every two hours, necessary, and have generally begun with less, except for the first dose.

7th. The influence of the opium should be kept up till the pain and tenderness subside, the tympanites diminishes in some degree, and the pulse falls below 100—then, with the concurrence of other symptoms, it should be gradually diminished, and at length discontinued.

A few remarks and statements may be needed to make some of these conclusions intelligible.

The usual effects of opium given in efficient doses for the cure of this disease, are, a disposition to sleep, but not profoundly; a contracted pupil; perspiration, often profuse; sometimes a red, blotchy eruption; diminished frequency of the respiration; subsidence of pain and tenderness; slight suffusion of the eyes; and after a variable time, reduced frequency of pulse. Of these effects, three have been chiefly regarded as the criterion by which each particular dose is to be governed. If, when a dose is due, the sleep is profound (the amount of sleep is of little importance, if the patient be easily roused from it,) there is reason to hesitate; if the respi-

ration has already been reduced to twelve in the minute, and is *very* irregular and sighing, the dose should be diminished or wholly withheld; yet so long as the tenderness continues, it is desirable to urge the opiate, but, of course, always within the limits of safety.

The respiration appears to be the most certain indication of danger. I have not generally aimed to reduce it below 12 the minute. Yet in almost every case it has fallen, once or twice in the course of the treatment, as low as 7, and sometimes to 5. In no instance, however, has the narcotism, taken as a whole, been so profound as in the case detailed above. No instance of fatal narcotism has yet occurred under my observation, nor among the many cases reported to me by others.

Regarding the tolerance of opiates in some of these cases—at the risk of being charged with rashness and trifling with human life, I will make some extracts from case 7. The treatment was commenced at 10 A. M. on the 26th of December—two grains of opium hourly. At 2 P. M. no change in symptoms, dose increased to gr. iv. At 3, gr. iv. At 4, gr. v. At 5, gr. v. At 6, gr. viij. At 8, gr. x. At 9, gr. xij. At 11, sol. morph. sulph. (sixteen gr. to f ʒi) ʒiiss. At 12, ʒj. At 1½ A. M. (respiration 6,) 0. At 6 A. M. (respiration 12,) opium gr. xij. At 10, sol. ʒj. At 12 M. opium gr. xij. At 1½ P. M. sol. ʒii. At 2½, ʒii. At 3½, opium xxiv. At 5, gr. xij. At 6½, sol. ʒijss. At 7½, ʒij. At 9, opium gr. xiv. At 10, gr. xvj. At 11, gr. xvij. 28th, at 1 A. M. sol. ʒiiss. At 2, ʒiv. At 3¼, opium gr. xx. At 4, sol. ʒiiss. At 5, ʒiij. At 6, ʒiiiss. At 6½, opium gr. x. At 7, sol. ʒiiiss. At 8, opium gr. xxiij. At 9½, sol. ʒiv. At 10, ʒiij. At 11½, ʒiij. At 12, 0. Thus this woman took, in the first 26 hours of her treatment, opium gr. lxxvij, and sulph. morph. gr. vij; or, counting one grain of sulph. morph. as four grains of opium, one hundred and six (106) grains of opium. In the second 24 hours, she took opium gr. cxlviiiij, and sulph. morph. gr. lxxxj, or opium four hundred and seventy-two (472) grains. On the third day she took 236 grains. On the fourth, 120 grains. On the fifth, 54 grains. On the sixth, 22 grains. On the seventh day, 8 grains. After which, the treatment was wholly suspended. This woman was not addicted to drinking, and after her recovery, she assured me repeatedly that she did not know opium by sight, and had never taken it, or any of its preparations, unless it had been prescribed by a physician. This is, perhaps, “horrible dosing,” and only justifiable as an experiment on a desperate disease. Yet this woman is alive to tell her story, as are several others who took surprising quantities of this drug. But later observations have shown that

the tenth to the twentieth part of this maximum is efficient in controlling the disease. So this case is referred to, not for imitation, but because, with similar cases, it is a medical curiosity; and may, perhaps, open some new therapeutical views.

The results of the opium treatment in the hands of my professional friends in this city have not been uniformly successful. This was to have been expected. When the path to success is so narrow, and so little trodden, though beset with dangers on both sides, it is unavoidable that many will lose it. But I believe I am authorized in saying, that those who have seen most of this mode of medication, are most attached to it. It is not to be expected that in a disease so dangerous as the one under consideration, any plan can be uniformly successful, even with advantages of accurate diagnosis and early treatment; but, when it is remembered that the diagnosis between purulent metritis and puerperal peritonitis is not always easy—and that this medication is successful in proportion to its early adoption—we may probably find reason for its failure in other hands, as well as in my own.

By way of illustrating the vigilance and discretion which must be exercised in the administration of each successive dose of the opiate in this mode of treatment, I will add, that it could never have been fairly tested by me without the zealous, intelligent and untiring assistance of the house-physicians of the hospital. They visited the patients every hour by night as well as by day, and every dose of the medicine, from the first case to the last, was given by them, and proportioned to the hourly exigencies.

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### **A Great Medical Discovery---Mercury taken from the System by Electricity.**

The following article is taken from a western paper:

The following will be received with intense interest in every community where suffering of any kind is produced by metallic substances being introduced into the system in the way of mercury, gold, silver or lead. If it is practically true, as scarcely any one can doubt, under the circumstances, it is destined to rank among the greatest discoveries that science has yet brought to light.

The article which follows, published in the Scientific Bulletin of Paris, is entitled "The Application of Chemical Electricity to Therapeutics," and has been translated for this pa-

per. Though not literal, the substance of the article is intact. The Bulletin says:

Chemistry is about to drag from an anticipated death thousands of men, who, in the exercise of their cruel professions—gilding, looking glass plating, white lead manufacturing, &c., and also those whose systems have been ruined by mercury in its various forms—for these science has raised her right arm and arrests their misery and destruction. This discovery extracts from their bodies, atom by atom, every particle of metallic substance from every part of the human system. Where do we get this great hope? In a memoir presented to the French academy of sciences by M. Dumas, which has for its authors two men, whose names will strike the ear of the public for the first time to-day. But if they prove what they promise to, they will soon take rank among the greatest benefactors of humanity. These authors are Andre Poly of Havana, and Maurice Vergenes. The invention consists of an application of chemical electricity to accomplish the above purpose; and of all the marvellous things that electricity has achieved, this is the boldest and most triumphant.

The *modus operandi* is as follows:

A metallic bath is insulated from everything, and partially filled with acidulated water, to convey more readily the electrical currents. The patient lies upon a seat in the tub insulated entirely from the bath. When gold, silver or mercury is in the system, nitric or hydrochloric acids are employed. When lead is suspected, the acid used is sulphuric. This done, the negative pole of a battery is put in connection with the bath, while the positive pole is in the hands of the patient. Now the work of purification commences. The electricity precipitates itself, hunts, digs, searches, and discovers every particle of metallic substance concealed in the most profound tissues, bones, joints, and nerves of the patient, resolves them into their primitive forms, and extracting them entire from the human organism, deposits them upon the sides of the bath, where they can be seen with the naked eye.

After the end of one of these operations, a chemist of Havana, M. Mossand, having analyzed 912 drachms of the liquid in the bath, he saw forming a metallic globule of the diameter of nine-tenths of a millimetre, and this was mercury. At another time the same chemist saw a very light white precipitated substance, which gave two globules of metallic lead, perfectly visible to the naked eye, and M. Poly announced that he had taken from the tibia and thigh bone of a patient, a quantity of mercury that had been there, creating intense suffering for fifteen years.

Providence has had its usual hand in this discovery. One of the inventors, M. Maurice Vergnes, who was engaged at times in electric gilding, silvering, &c., where his hands came in continued contact with the nitrate and cyanuret of gold and silver, had them covered with ulcers, caused by particles of the metal being introduced into his blood, and no medical skill could eradicate them. One day he dipped his hands into the bath, taking hold of the positive pole of the battery, and at the end of fifteen minutes, to the surprise of the bystanders, a metallic plate of 163 millimetres in length by 109 in width placed in connection with the negative pole of the battery, was instantly covered with a thick coat of gold and silver extracted from his hands. The discovery was made. This event took place April 16, 1852. The inventors use 30 couples or batteries or Bunson's and Grove's combined, it being found that a more energetic current will be evolved by this combination than by the use of either singly. Each couple is 40 millimetres in diameter by 217 in height. The number of these couples or batteries used at the commencement of an application, so as not to cause too much suffering for the patient, depends altogether upon the temperament of the patient and the nature of the disease. For example, a very nervous and delicate person would be submitted to the action of ten or twelve couples at first, the number increased at the rate of five couples every five minutes. A person of sanguine or lymphatic temperament can endure more. The same ratio applies to the quality of acid in forming the bath; for instance it takes less for a nervous person than for a person with lymphatic or sanguine temperament. The metallic particles extracted from the body of the patient are deposited on the whole surface of the bathing tub, although the metal is formed in larger quantities opposite those parts of the body in which the metal lay concealed. As to the size of the metallic spots which are thus formed by the application of this discovery, they vary in size from that of the head of a pin to the size of a pea, and some are microscopic.

"I have seen," says M. Poly, "after the first bath of a person who had been complaining of terrible pains in his arms, caused by mercury, the exact shape of the arm imprinted on the negative plate of the battery—the deposit being formed entirely of mercury drawn from the arm."

Here ends this important article, which, if true, is destined to become as much a part of the medical practice as vaccination.

## On the Treatment of Gleet.

BY M. RICORD.

[M. Calvo, a private pupil of M. Ricord, has recently published in the *Moniteur des Hopitaux* reports of the lectures at the Hôpital du Midi during 1854. Here are some useful points in regard to the management of blennorrhœa, which we take from the number for September 12th of the journal alluded to. On a future occasion we may make further extracts.]

Notwithstanding the most judicious treatment, blennorrhagia often passes into the chronic stage, and becomes the intractable disorder termed blennorrhœa, goutte militaire, or gleet.

When this occurs, it is proper in the first place to examine the meatus of the urethra; the lips of this orifice should be separated, and if any inflamed follicles are perceived, they should be incised with a cataract needle and cauterized with nitrate of silver.

If the discharge continues, it will be necessary to institute an internal treatment. The patient may take from three to six spoonsful of a solution of one drachm of citrate of iron in a pint of syrup of tolu, and drink freely of tar water, or of a decoction of *uva ursi*; I also frequently prescribe turpentine and Canada balsam in the dose of six-grain pills morning and evening.

The remarkable success obtained by means of the preparations of iodine, the iodide of iron particularly, in the treatment of chronic purulent discharges, induced me to employ these preparations in the treatment of gleet. The results have entirely satisfied me, and I regard the pills of the iodide of iron, preserved by the method of Gille, as the most efficacious medicament we can oppose to those chronic discharges, which are so rebellious as to cause the most experienced practitioners to despair of their cure. Four to eight pills may be taken daily; each pill contains one grain of the iodide.

Blisters to the perinæum or the inner surface of the thighs sometimes have a good revulsive effect, and occasionally cut short the disease; sea bathing has the same effect.

The following injections are suitable in this period of the disease: Rose water six ounces; sulphate of zinc and acetate of lead, each, half a drachm; or twenty or thirty grains of tannic acid may be substituted for the acetate of lead in the above formula. Or the patient may use an astringent injec-

tion composed of equal parts of water and Roussillon wine, with the addition of a little sugar. Here are two other prescriptions which are sometimes useful: vinous infusion of red roses, six ounces; tannic acid, one or two scruples—Mix. Distilled water, six ounces; iron filings, one scruple; proto-iodide of iron, four to six grains. Mix, and take care not to shake the phial.

There are some obstinate gleet, uncomplicated with stricture, which can only be cured by the introduction of bougies. These instruments cause a mechanical irritation, an artificial gonorrhœa, which may be cured by cubebs and injections. The pewter bougies of Beniquè answer admirably for this purpose; they should be introduced gently, and left in place two or three minutes.

There is another plan which may be used as a last resource; it consists in cauterizing the whole canal of the urethra with Lallemand's caustic holder. The instrument is introduced until its extremity reaches the neck of the bladder; the canula is then drawn back and the cup of caustic is exposed and rapidly rotated as the instrument is withdrawn. There is considerable pain and scalding during micturition after the operation, but these symptoms rarely last long, and two or three cauterizations commonly put a stop to the gleet. But there are some cases which resist all the means I have described: in such, it is the surgeon's duty to recommend a tonic regimen, moderate sexual indulgence, residence in the country, mental diversion, and above all the patient should be exhorted not to think about his complaint, which is too often a cause of hypochondria and even of suicide in weak minded individuals.

*West. Jour. Med. and Sur.*

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### **Uterine Tumor removed by Ligature.**

BY DR. J. C. LEE OF NEW YORK.

On the 25th of March 1850, I was called to see Mrs. ——— aged thirty-six years. She had been six years married, without issue. I found her laboring under retention of urine, which had resisted all previous treatment for several days. On application of the catheter, nearly five pints of water were immediately withdrawn. On further examination, a hard tumor was discovered within the uterus, to all appearance of the size of a foetal head at about seven months. After learning by careful investigation that she was not pregnant, I en-

deavored to pass a sound through the cervix; but from its firm and unyielding condition, and the pressure of the tumor against it, I was obliged to defer that operation till a dilatation could by some other means be effected. Finding all attempts at a dilatation fruitless, and being under the necessity of using the catheter daily, the removal of the tumor without delay became of inevitable necessity. I now conceived the idea of opening the os uteri by incision; but before venturing upon so formidable an operation I called in consultation Dr. Cheeseman, who agreed with me on the propriety of the operation as the only means of dilating the os sufficiently to admit of the passage of a ligature around the pedicle of the tumor. On the day after our consultation I performed the operation upon the os uteri as agreed upon, viz: by making a *crucial incision* through the os, to the extent of about an *inch* in either direction, when instantly the cervix was dilated by the pressure of the tumor to more than two inches in diameter. She now felt a sensation of labor pains, which was encouraged by the use of ergot for a short time, but all to no purpose; it was therefore abandoned to give place to the ligature. The finger could be passed freely within the uterus and turned completely round the tumor, which very much resembled, to the touch, a foetal head, as above stated. Next, a sound was passed and turned around the superior portion, excepting where it was attached by a narrow pedicle to the fundus of the uterus.

The patient being now fully prepared, I determined to operate by ligature on the 20th of April. I invited Drs. Childs, Ford and Simmons, who very kindly gave their assistance on the occasion. With the ordinary needles in use for this purpose, I had little difficulty in passing a ligature around the pedicle; but from the large size of the tumor, the strangulation could not be effected without making a considerable curve in the main shaft of the instrument which remained, and by means of which the ligature was daily tightened.

On the fourth night after, she was attacked with most violent rigors alternating with syncope, and I was summoned in great haste to her relief. When I arrived she was comatose, with a pulse scarcely perceptible. After the application of external heat, and the use of a little stimulus, she was aroused to consciousness and soon was comfortable, although there was a good deal of tenderness over the abdomen. An anodyne pill, with laudanum formetations to the parts affected, was ordered for the night; the ligature examined, and I returned home.

The next morning, the 25th of April, I found on the slightest

strain of the ligature that the pedicle was cut through, and the ligature with the instrument came away. Now, by passing the finger, the tumor could be turned around within the uterus, like a ball snugly fitted in a socket. Next, a strong hook, expressly manufactured for the occasion, was fastened into it, and force applied, at the same time the uterus was supported by the other hand until it separated, when a quantity of serous fluid was discharged, which rendered the tumor more elastic and compressible, so that on application of the hook a second time I was enabled to remove it, but not without using quite a considerable force.

The root of the pedicle at the fundus was quite perceptible to the touch, and the entire walls of the uterus, as well as the ovaria, were very much enlarged—so much so indeed as to obstruct for several days the passage of the water. These difficulties, however, soon passed away, and the patient became quite well. I saw her some three years after, and she informed me she had never had a day's sickness since I discharged her as cured.—*Am. Med. Gaz.*

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### **Treatment of Fractures.**

BY JOHN M. PUGH, M. D. OF WEST PHILADELPHIA.

Mr. J. W. V., carpenter by trade, a strong, athletic man of middle age, but whose constitution was somewhat shattered by intemperate habits, one night in the month of July last, while on his way home, fell with his knee on the curb, as nearly as could be ascertained, and fractured the patella in a transverse direction. I was not called upon until several days had elapsed. Upon examination, it was found that the two fragments were completely separated, and that a finger could readily be placed between them. There being much tumefaction, as well as inflammation of the integuments, about twenty leeches were ordered in the first place, to be followed by cooling applications. The patient was then placed upon his back—a muslin bandage, about four inches in width, was applied in a circular manner some eight or ten times above and below the knee. Having done this, strips about half as wide were passed under each ring on each side of the patella, and in that way, the fragments were brought as nearly together as the swelling would permit; as that subsided, the lateral bandages were made tighter, until the pieces of bone were brought in complete contact. A long splint, extending

from the axilla to the foot, was kept to the limb, in order to secure immobility until a union of the fragments had begun to form, and until the patient had become habituated to the confinement of the apparatus. As soon as these objects were accomplished, the splint was removed, the patient was even allowed to sit up, taking care to keep the leg in a horizontal position. It may be well to state, that on a former occasion leather was used instead of muslin, (taking the precaution to have a soft substance between the leather and the skin,) and by the use of buckles, the rings could be graduated to suit the circumstances. In the present case, the more complex apparatus was not convenient, or was not at hand, and I found, much to my satisfaction, that the simple means just mentioned answered the purpose admirably.

In about four weeks, this practice had so far progressed successfully, that a perfect union appeared to have been formed. In two weeks more everything was removed—the patient dismissed from my charge, and at present it could not be discerned that this man had suffered from the fracture by his walking, although it has been pretty well tried, having experienced several severe tumbles since.

*Phil. Med. & Surg. Jour.*

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### **A Case of Diaphragmatic Hernia.**

BY DR. F. L. TANEY.

Daniel McLeod, aged about twenty-eight years, was admitted into the Charity hospital on the 1st of April 1854, suffering with a penetrating wound on the left side, which extended through the 7th rib into the pleural cavity. Both air and blood escaped from the wound; traumatic pleurisy then followed, which lesion, by its consequences, compelled him to remain under treatment until the 1st of June following; in which space of time the external wound had completely cicatrized. He left the hospital by his own wish, free, apparently, from the serious results of the wound. Yet his subsequent history shows that he did not experience the enjoyment of uninterrupted health, for on several occasions after his departure, he suffered inconveniences, and did, at each time, seek medical aid at the Marine hospital; and it was on the 1st of March 1855, that he was brought back to the Charity hospital, nearly a year after the wound had been made.

His symptoms were much like those of a person suffering from acute gastritis, caused by a mineral poison; but, although the existence of the same signs might be traced, their mode of manifestation was dissimilar. He complained of a peculiar burning in the epigastrium, not at all aggravated by pressure, but attended with restlessness and great anxiety. That pain, too, was constant, neither increased nor diminished by the movements of the diaphragm; and respiration was easy and unconstrained. Frequent vomiting tormented him much; drinks and nourishment of all kinds were rejected as soon as swallowed. Accompanying this, a burning thirst compelled him to resort, ever and anon, to cooling draughts; but instead of assuaging, they served to increase the suffering, and the pain they occasioned in the interval was equivalent to a total privation. Hiccough formed no part in the disorder. The bowels were bound, and all the remedial agents, usually employed in such cases, failed to accomplish the desired end. The urine was scanty, abdomen perfectly flat and seemed not to contain the usual amount of intestines. His intellect was clear to the last.

To these local symptoms were added collapsed features, a pulse small and threadlike, extremities and surface of body cold and damp.

The questions as to the nature of the disease, which naturally arose, were the following: Was the case one of acute gastro-enteritis only? Is it accompanied, or caused by an internal strangulation? And if a strangulation or obstruction, what was its nature? Did it arise from the results of by-gone inflammations—bands of lymph constricting the gut? Might it not be the appendix vermiformis tied around a piece of the intestines? Was it a case of intussusception? But no, nothing of all this. Dr. Wederstrandt, a man quick of thought and sound in judgment, pronounced that it might be an internal strangulation, such as would happen in a diaphragmatic hernia.

The recollection of a case of diaphragmatic hernia, the subject of which was the late Senator Barrow of this state, suggested that this might be a parallel case. Mr. Barrow while in Washington was attacked with the identical symptoms mentioned above, and died after an illness of two days. A post mortem examination revealed an abnormal opening in the left side of the diaphragm through which a portion of the stomach and intestines had protruded, and entered the left pleural cavity, where they remained in a state of strangulation. On further enquiry, a cicatrix was found on his left side, and an old servant related that it had been caused by a pene-

trating wound of the chest which his master had received about twenty years previously. It appeared that a perforation of the diaphragm had then been made, which had never closed, and which led to the hernia twenty years after.

Daniel McLeod died after seven days' illness. The opening in the diaphragm, through which the viscera had protruded, was situated in the muscular portion, on the left side, perfectly round, three inches in circumference; its edge was smooth and thickened; it gave passage to one-half of the stomach—part of the transverse, and descending colon and omentum into the left pleural cavity.

The protruded viscera laid loosely in the chest, and unconfined by any sac; the pressure upon the lung was considerable, in consequence of which it had been flattened against the vertebral column, and kept thus by bands of lymph; the gradual change of the lung explains the easy and tranquil respiration. During life there was dullness on percussion, and absence of respiratory murmur over the left side. This, we may mention, favored also the supposition of the nature of the case. Nearly all diaphragmatic hernia recorded in the annals of medical literature have been described as being perfectly devoid of a sac. J. L. Petit, however, mentions a case, of which he says, the patient had suffered for a long time with asthma, and after an inflammation of the abdomen he died.

The autopsy was made, and he found situated on the left side of the chest a tumor, four or five inches high, as large at the base as through its middle. This hernia was possessed of a sac formed by the distension of the diaphragm; that portion of the muscle which formed its base, appeared neither ruptured nor abraded. The peritoneum formed one of its internal coverings.

The cases we have mentioned, like others on record, go to show that wounds of the diaphragm are not apt to close, probably in consequence of the incessant action of that muscle; and that they may prove fatal by giving rise to hernia a long time after their infliction; and this, in a legal point of view, is of vast importance. The knowledge of these facts must be powerful weapons in the hands of justice, helping it to deal the blow on him who disregards its existence, and violates its most sacred laws.

We have sufficient numbers of examples, to corroborate facts we have mentioned; in Taylor's Jurisprudence a similar case to ours is mentioned. Sir A. Cooper mentions many cases in his work on hernia.

The existence of hernia, nearly always on the left side, may

appear to be a strange fact; yet, by the consideration of the position of the parts, liable to be at fault, we cannot but deem it natural that the accident seldom occurs, only on that side; for unless the rupture in the muscle be excessively large, the liver, by its situation, acts always as an obstacle to the formation of the hernia. The liver has been perforated through the diaphragm, and yet no hernia afterwards is said to have taken place. Laennec relates a case where, after the performance of paracentesis—thoracis on the right side, between the fifth and sixth ribs, it was found, after death, that the instrument had penetrated both the diaphragm and liver.

Yet hernia on the right side may happen, as we have said, provided the rupture be extensive. Petrequin relates a case, the subject of which had fallen from a height, and had been covered by the falling of a mass of earth—the seventh rib was fractured—the patient died twelve days after the accident. The post mortem examination revealed the rupture of the diaphragm, beginning on the right side, and extending to the left—the whole of the right lobe of the liver, together with a portion of the colon, had protruded in the right pleural cavity.

A circumstance worthy of remark in the above case, was the symptoms strongly marked the mode of dying by *asthenia*—"the small and weak pulse, afterwards thready and feeble, the depression of the muscular power, the patient pale and faint," all show the great sympathy between the stomach and the centre of circulation—the heart.

*N. O. Med. News, &c.*

### **A Case of Twins with Shoulder Presentation of the First Child.**

BY W. M. HOUSTON, M. D., URBANA, OHIO.

On the morning of the 3rd of February last, I was aroused before daylight by Mr. T——, who informed me that his wife was in labor, and her physician, Dr. Wood, wished me to bring some instruments and assist him in delivering the child, as it presented with the shoulder and the position could not be changed.

I proceeded to the house immediately, and on examination found the left arm protruding from the vagina, the back towards the abdomen of the mother, the head in the right iliac

fossa, and the breech in the left. The patient was a small woman: this was her first confinement, and was premature by about two months. Her labor commenced in the early part of the evening before, and she had been in the condition above described for several hours previous to my visit. In attempting to change the position of the child, I found the external organs very tender, the introduction of the hand causing a great deal of pain, and at the same time the uterus contracted with so much force that it was impossible to move the child one way or the other. At my suggestion chloroform and ether were administered, and when she was completely under the influence of the mixture, I introduced my hand into the vagina, and with the index and middle fingers traced the body of the child to the groin, and by making traction at this point the hips began to descend, the shoulders passed up, and in a few minutes the child was expelled as in breech presentation.

On tracing up the cord to ascertain the condition of the placenta, my finger came in contact with a second child, offering a vertex presentation. Supposing the trouble to be now at an end, I took my departure, leaving the patient in the care of her first physician. About four o'clock in the afternoon, the husband again called with a message from Dr. W., requesting me to bring the forceps for the purpose of removing the second child. I went up immediately, and found the patient sleeping very comfortably, and the Dr. waiting with as much patience as the nature of the case would admit of.

He informed me that the membranes ruptured soon after I left in the morning, that the contractions were regular but feeble, she had taken freely of ergot but the pains were not increased by it, and he thought the forceps should be used. In about a quarter of an hour after my arrival she awoke, and on examination I found the head had descended very little, if any, since morning. By irritating the os uteri with the finger, making traction on the cord of the first child and grasping the abdomen with the hand, the uterus was stimulated to contraction, and in fifteen minutes the child was expelled; the placenta followed almost immediately, thus ending a protracted and complicated labor to the great gratification of all concerned.

Cases of this kind are certainly very rare; very few are reported in the books, and none of my acquaintances, so far as I am informed, have ever had the misfortune to encounter a case of this kind in their practice. Shoulder presentations are unwelcome at all times, but doubly so when complicated as this was by the presence of another child in the uterus, and any suggestions that can be made that will enable the ac-

coucheur to conduct such cases to a favorable termination, will not be considered superfluous when he finds himself with a similar case on hand.

The result in this case shows, also, that by a little address we may sometimes avoid a resort to the use of instruments, when they seem to others to be absolutely necessary.

*West. Lancet.*

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### Case of Penetrating Gun-shot Wound of the Heart.

BY J. M. CARNOCHAN, M. D.

Surgeon-in-chief to the State Hospital, Professor of Surgery in the New York Medical College, &c.

On the 27th of February 1855, I was called in consultation to see William Poole, a young man aged 33 years, of unusually athletic form and muscular development, who had been wounded two days previously in an affray with fire-arms. He had received a bullet wound in the outer aspect of the right thigh, two inches above the upper border of the patella. The wound, however, which created alarm among his friends, was situated upon the anterior wall of the thorax, about three-quarters of an inch to the left of the mesial line, and about half an inch below a line drawn across the chest, from one nipple to the other. A bullet probe could be passed slantingly from right to left, along the track of the wound, for about an inch. At this depth, the probe was arrested, and it was not thought expedient to use force in making farther exploration. Poole received his wounds during a deliberate onslaught made on him by some five or six persons, armed with Colt's revolvers. The first ball took effect on the right thigh, and brought him to the ground. While thus prostrate, another assailant placed the muzzle of a pistol close to his chest, and discharged its contents. He immediately jumped up, and reeling towards a door, rested, as if stunned, against it for support, during some minutes. He then fell, exclaiming that he was dying, and remained senseless, cold, almost pulseless, and apparently moribund, for about four hours. From this condition he rallied, and became so free from the usual symptoms of severe injury, that his medical adviser, Dr. Putnam, considered that the ball had really not penetrated into the thoracic cavity, and my opinion was sought to corroborate or dispel this favorable view of the case.

I found him sitting up in bed, his back resting on pillows as a support, apparently at ease, and conversing with numerous acquaintances, who had come to visit him. His countenance exhibited no expression of anxiety, and he answered placidly and without effort the questions I put to him. His pulse was 80 in the minute, the respiration easy, the surface of the body normal in temperature and moist. The stethoscope revealed the existence of no difficulty in the respiratory passages, and the normal *tick tac* of the heart beat with healthy precision. There were no signs of inflammation or of effusion into the pericardium.

With such freedom from morbid symptoms, I was disposed to concur with his medical adviser in auguring favorably of the case; for although it might be inferred from the external character of the wound, that the ball had passed somewhere into the cavity of the chest, it was not impossible that it had become lodged in some position, where it remained innocuous.

The previous treatment had been gently antiphlogistic; mild aperients, diaphoretics, acidulated drinks and low diet. The consultation resulted in a continuation of a similar mode of treatment, with the injunction, that he should be kept in a state of absolute bodily rest, and free from every cause of mental excitement, as I felt far from certain that he had not sustained mortal injury.

The symptoms in Poole's case illustrate in a remarkable degree some of the peculiarities of wounds of the heart, and also the assertion made by Hervey, that the heart is not very sensible. I am informed by Dr. Putnam, who saw him at one o'clock on the morning of the 25th, about fifteen minutes after the wound was received, that the patient was at first nearly pulseless, was insensible, and that respiration was performed with great difficulty. In this condition, laboring also under the ordinary signs of shock to the system from a gun shot wound, he continued for about four hours, before any signs of reaction were manifested. Vomiting now occurred; this was followed by increased action of the heart, and sensibility gradually returned.

During the same day (25th) he continued improving, and on the evening visit, the pulse beat 84. The skin was moist and natural, tongue healthy, with no unfavorable symptoms otherwise. No external hæmorrhage had occurred from the wound, nor had any evidences of internal hæmorrhage been evinced by vomiting or expectoration.

Monday, 26th. The wound was examined more particularly, and no traces of the bullet could be found, or any special indications manifested of its presence in the cavity of the thorax. Symptoms about the same.

Tuesday, 27th. I saw the patient for the first time, and found him in the favorable condition already stated.

Wednesday, 28th. Complained of slight headache, pulse 86, bowels not having been moved, a gentle aperient was ordered, by which the pain in the head was relieved. At times the patient had complained of transient and slight pain about the region of the heart.

Thursday, March 1st. Was called in to see patient a second time. Had slept well; pulse 80; respiration natural; appetite good; skin moist; action of the heart natural. He stated that he felt no pain or unpleasant symptom except weakness, remarking, however, that he felt well enough to go out.

Friday, March 2d. The patient perfectly comfortable; pulse 82.

Saturday, March 3d. Patient so well that, upon visiting him, for the third time, by request, he was found receiving his friends, and, contrary to previous injunctions, conversing freely with them. Enjoined repose.

Sunday, March 4th. No untoward sign connected with either the functions of circulation or respiration. During the day, he received, against positive orders, the visits of more than a hundred people, with whom he conversed. His own statement was that he felt quite well.

Monday, March 5th. Dr. Putnam was sent for early in the morning. At eight o'clock, A. M. the patient was found in a high state of irritability; pulse 120; skin hot and dry, and complains of pain generally; respiration troubled and more frequent. An aperient was ordered, by which the symptoms were much alleviated.

Tuesday, 6th. Was again requested to see patient. Pulse 100; countenance anxious; the adnata tinged yellow; complained of debility, but said he had no pain about the heart; signs of effusion.

Wednesday, 7th March. Passed a restless night, notwithstanding the administration of an anodyne; pulse 120; countenance more anxious; respiration much troubled; inability to remain in the recumbent posture; symptoms gradually becoming more grave.

At two o'clock, A. M. Thursday morning, his attending physician was sent for. The patient was now rapidly sinking; pulse almost imperceptible, and with difficulty counted; respiration short, frequent and difficult; extremities cold; countenance pallid and hippocratic. From this time he continued to sink, and expired, without a struggle, at 5 o'clock.

*Autopsy* seven hours after death.—The body was in a state

of perfect preservation, and showed a powerful and well-developed organization.

The surface of the body presented three orifices of gun-shot wounds: two on the external side of the right thigh, a short distance above the patella, by which, apparently, a ball had made its entrance and exit, respectively; and one on the anterior aspect of the chest, three-quarters of an inch to the left of the median line, and about half an inch below a line drawn across the chest, from one nipple to the other. The examination revealed that all the organs of the body were in a healthy condition.

The sternum and cartilages of the ribs having been partially elevated, a bullet probe could be passed without difficulty, slanting from right to left, through the wall of the thorax, at the place of junction of the cartilages of the fifth and sixth ribs with the margin of the sternum.

The sternum being completely elevated, the pericardium was seen to be much distended, and on its surface, in continuation with the external wound, was observed a rough spot, which proved to be an opening into the cavity of the pericardium, thinly closed by the exudation of plastic material.

The right and left cavities of the pleura were free from effusion, and the lung on each side was in a sound condition. The pericardium was found filled with serous fluid, tinged with blood, and was so distended that it encroached very much upon the lungs on both sides. Upon opening the sac of the pericardium, and removing the large quantity of serous fluid, the external surface of the heart and the serous lining of the pericardium were both found to be entirely covered with plastic exudation, presenting all over signs of high inflammatory action. A cursory examination of the heart in position did not disclose the presence of any foreign body. It was afterwards taken out, and upon a careful examination, a bullet one inch in circumference, was found enveloped in a delicate cyst, and imbedded, to the depth of a quarter of an inch, in the muscular tissue of the septum, between the right and left ventricles, about midway between the apex of the heart and the base of the ventricles. Its locality was only indicated by the sense of touch, for as the wound had entirely cicatrized, there was no outward visible sign of its presence. Obviously, the cause of death was inflammation of the pericardium and heart and its results.

This case is one to be added to the few already on authentic record showing that penetrating wounds of the heart are not always immediately mortal.

It has, moreover, peculiar features which will render it remarkable in the annals of surgical pathology.

Several cases are mentioned in which patients have survived one or more days the effects of penetrating and non-penetrating wounds of the heart, inflicted by cutting instruments, and also of non-penetrating wounds inflicted by *gun-shot*.

But the peculiarity of this case is, that although the wound was a penetrating gun-shot wound, leaving the ball deeply buried in the tissue of the heart, the patient survived for a period of time so long as to encourage the hope of recovery.

This position of the ball discriminates the case from that mentioned by the French surgeon, Latour, where the ball had not penetrated deeply into the heart, but rested on its surface, partially encroaching upon the muscular wall of the heart and enfolded partly by the pericardium.

The autopsy of this case also revealed, that the wound was not only closed and cicatrized, but that a cyst was in process of formation around the ball.

By this case, also, it is established, that hæmorrhage is not necessarily a consequence of a gun-shot wound of the heart; for the serum found in the pericardium was merely tinged with blood, and there was no coagulum. The absence of hæmorrhage may be accounted for by the conical shape of the ball, and by its direction, two circumstances which favored its passage between the muscular fibres of the superficial layer of heart, without severing them, and caused it to rest slantingly behind the anterior coronary artery, without wounding it.

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### Criminal Abortion.

Our distinguished townsman, Professor Hodge, has done science and humanity good service in bringing prominently before the profession this abominable subject. The following paragraph embodies the sentiments of the respectable portion of the profession of our city, as taught by Drs. Dewees and James :

“Nutrition, growth, the development of organs, the successive display of organic, animal, intellectual, moral, and spiritual functions, are but the successive manifestations of that mysterious principle of life, the gift of the Creator, which, feeble as it may be when first exerted within the dark impene-

trable recesses of the mother's system, daily and hourly gains strength and energy, continually developing new organs and new functions, until, under its plastic and reviving influences, the invisible product of conception is developed, grows, passes through the embryotic and foetal stages of existence, appears as the breathing and lovely infant, the active, the intelligent boy, the studious and moral youth, the adult man, rejoicing in the plenitude of his corporeal strength and intellectual powers, capable of moral and spiritual enjoyments; and finally, in this world, as the aged man, whose system is preparing for new transformations, which, however humbling they may at first appear to the pride of man, and however apparently destructive to his corporeal and intellectual existence, are but the precursors of that glorious change, when, as Revelation teaches, 'these natural bodies shall become spiritual bodies,' 'when this corruptible shall put on incorruption,' when changes will be effected infinitely greater and more mysterious than occur at conception, and during gestation, and when it will be found that the existence commenced in the ovary of a woman, mysterious and wonderful as it may be, is but the commencement of a series of changes, each more wonderful and glorious than its predecessor, to which the *same identical human being* will be subjected, perhaps for eternity."

The following paragraphs state simple but horrid facts, as witnessed in our large cities. Let the profession, as such, set its heel upon the sentiment and the practice—and cease to be panderers to vice of the worst form.

"We blush, while we record the fact, that in this country, in our cities and towns, in this city, where literature, science, morality, and Christianity are supposed to have so much influence; where all the domestic and social virtues are reported as being in full and delightful exercise; even here individuals, male and female, exist, who are continually imbruing their hands and consciences in the blood of unborn infants; yea, even *medical* men are to be found, who, for some trifling pecuniary recompense, will poison the fountains of life, or forcibly induce labor, to the certain destruction of the foetus, and not unfrequently of its parent.

"So low, gentlemen, is the moral sense of the community on this subject; so ignorant are the greater number of individuals, that even mothers, in many instances, shrink not from the commission of this crime, but will voluntarily destroy their own progeny, in violation of every natural sentiment, and in opposition to the laws of God and man. Perhaps there are few individuals, in extensive practice in obstetricians, who have not had frequent applications made to them by the

fathers or mothers of unborn children, (respectable and polite in their general appearance and manners,) to destroy the fruit of illicit pleasure, under the vain hope of preserving their reputation by this unnatural and guilty sacrifice.

“Married women, also, from the fear of labor, from indisposition to have the care, the expense, or the trouble of children, or some other motive equally trifling and degrading, have solicited that the embryo should be destroyed by their medical attendant. And when such individuals are informed of the nature of the transaction, there is an expression of real or pretended surprise that any one should deem the act improper—much more guilty; yea, in spite even of the solemn warning of the physician, they will resort to the debased and murderous charlatan, who, for a piece of silver, will annihilate the life of a foetus, and endanger even that of its ignorant or guilty mother.”—*Phil. Med. & Sur. Jour.*

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### Case of Twin Delivery.

DR. NELSON :

Dear Sir—Some time since I promised to send you the reports of a case or two of midwifery, I now fulfil part of that promise by sending you a case of twins, with the two abdominal cavities into one, which if you think worthy of a place in your very valuable *Lancet*, you are now at liberty to publish.

On the 17th of December 1850, I was requested to visit the wife of Mr. John Jackson, of Drummond, C. W., aged 22, in her first labor. On examination I found the head distending the perineum with the face towards the pubis, being the fourth direct position, or occipito-sacral; here, as I was informed, the head had been detained for a considerable length of time previous to my arrival. However, after a few pains more the head was slowly born, and to accelerate the delivery of the body I brought down the arms; still the delivery was tedious. Again I made an examination, with the hope of ascertaining whether I had or had not got a short funis to contend with, but could find no cord, the belly being drawn upwards and backwards. While withdrawing my hand a pain came on that expelled the breach, I then turned the feet of the child over the pubis of the mother. Still in the belief that I had got a short cord to contend with, and

expecting that a few pains would expel the placenta, I was supporting the child in that position, when the hand of another came forth. Again I made a digital examination and found the head filling up the cavity of the pelvis; when two or three pains more, expelled both head and body, with the cord attached to the side of the belly belonging to the last born child. After a few convulsive twitches the children ceased to show any symptoms of life.

On examining them as they lay on the lap of a female attendant, they were united in the following manner: The right side of the one was attached to the left side of the other, beginning about the 7th or 8th rib, two inches, or thereby, from the spine of each, and decending to the middle of the sacrum and ilium—and again from the right outside of the one to the left outside of the other, was one sheet of abdominal muscles, extending from the pubis to the sternum of both. The placenta came away in due time and the woman had a good recovery.

Their heads, shoulders and chests were of good size for twins; pelvis and lower extremities small. Abdomen very large; the children were both females.

Yours truly,

A. MUNRO, Surgeon.

Lanark Village, Canada West, Jan. 1855.

*Nelson's American Lancet.*

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### Tardy Labor---Convulsions.

BY W. C. LANKFORD, M. D. OF LOUISBURGH, N. C.

On the morning of the 20th of November, I was hastily summoned to visit Mrs. W., aged 21, plethoric, and in her first accouchment. I arrived at 6 A. M., and found her comatose; pulse 70; no pains; and on enquiry, was told that she had had three convulsions that morning. Her lips were swollen and her tongue protruded, and bit in several places, from the effects of the convulsions. She had been confined since the evening of the 18th, and had been waited on by the *Old Granny*, who had done nothing, but was *waiting* for the *misery* to come on. She thought the patient had labor pains about five o'clock the preceding evening. On examination I found the os slightly dilated; a convulsion (epileptic) came on during

the examination which was thought to be more severe than any previous. They were now increasing in frequency and intensity, which showed that something had to be done, and that, too, which would effect a speedy delivery. Venesection is what most authors advise under such circumstances, and is quite a popular treatment; but why take away the very last spark of life from an already prostrated system?

Why resort to the lancet to diminish the circulating fluid, and thereby the strength of the system, when we wish all the power the system can command, and that, too, concentrated at one point to expel the foetus? Bleeding would not have checked the convulsions, for the protracted labor had prostrated the patient, rendered the nervous centres irritable, and, consequently, thrown the patient into convulsions. Then to get rid of these we must first deliver the woman: For which purpose I administered ergot in scruple doses, warm bath, and tart. antim. in 2 gr. doses until pains came on, which was about 12 o'clock, M. At 1 P. M. I delivered her of a fine, living child; the convulsions continued until the birth, after which the antimony was persevered in until night without recurrence of convulsions. Mother and child are now doing well; neither of whom, I believe, would now have been in existence, had I bled on my arrival, though I may be singular in my opinion, as I deviated from a very general treatment.

*Nelson's Am. Lancet.*

### History and Properties of Guaco.

DR. NELSON:

Dear Sir—In the “Annual of Scientific Discoveries and Inventions” for 1852 or 3, there is an account of a plant named Guaco found in Brazil, which is possessed of the power of neutralizing the poison of the most deadly serpents; in fact, as appears by the narration of a gentleman, in that periodical, he was enabled by drinking an infusion of the leaves to handle with impunity snakes of the most venomous kind.

In Braithwaite's Retrospect, No. 27, the same plant is noticed in an article taken from the Medical Times and Gazette, of Dec. 25th 1852, and the same testimony is borne to its powers as an antidote to serpent bites. The gentleman who notices it also observes that he is in the habit of prescribing it in sciatica, chronic rheumatism and deafness, with un-

erring success. He adds that, "When on board Her Majesty's frigate Calypso, returning from the coast of Mexico, many of the crew were attacked with bilious remittent fever, and during the stage of convalescence, when languor was almost a second disease, the exhibition of guaco was found most magical in its effects, restoring appetite and sleep, when quinine caused headache, and increased the thirst and restlessness." It was also given with success in chronic dysentery, and those diseases characterized by nervous debility.

Now the subject of my troubling you on this occasion is to suggest the propriety of giving it a trial in cholera as a prophylactic and also during an attack of the disease. No doubt can be entertained (if we credit the reports furnished by those who have seen its effects,) of its acting powerfully on the nervous system, if it disarms the most deadly snakes of their power to communicate their poison to the human body; and reasoning by analogy, might it not also neutralize the mysterious miasm of cholera, and as it deprives the serpent of his power to bite and cures when bitten, it is not impossible but that it may have the same effect in certain diseases? True we have no proof of any similarity between the two poisons, neither have we any proof *vice versa*, but at all events it is worth trying. But where can it be procured? that is the very thing I want to know, and if any of your southern readers who are more likely to be in the way of having of it, or sending to Brazil for a parcel, could give any information on the subject, it would be very thankfully received, by me at least. The following is the formula for its use as a tincture: R. Powdered guaco ʒij; proof spirit Oj. Mix and macerate for eight days—dose, ʒj—ʒij. I should think that in hydrophobia it would be worthy of trial.

Yours truly,

ARTHUR PATERSON, Surgeon.

Woodstock Co. Oxford, C. W.

18th December 1854.

*Nelson's American Lancet.*

### Death of Dr. Golding Bird.

On the evening of Friday, the 27th of October, this excellent and accomplished physician breathed his last. For some months past his failing health had obliged him to relinquish all professional exertion, and in June last he finally left London to seek repose, though not health, at Tunbridge Wells. Although he had long suffered from affection of the heart, the immediate cause of death was connected with kidney disease, and thus he fell a victim to a malady, to the elucidation of which the greater portion of his professional life had been devoted, and in the diagnosis and treatment of which he had been one of the greatest authorities.

*London Lancet.*

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### Death from the Extraction of a Tooth.

A physician writes to the editor of the Louisville Courier, that some time since a young lady of Oldham county, in her ordinary health—perfectly well the family say—rode two miles to a physician and had a tooth extracted. Almost immediately a paralysis on one side of the body occurred, then stupor, and death followed in a few hours. She had not inhaled chloroform or anything of the kind.

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### A Radio-Ulnar Ligament lately Discovered.

M Denuce in a thesis “on the luxations of the elbow joint” lately published, mentions among other things that near the annular ligament, in which plays the head of the radius, he has, by his dissections, discovered another ligament of about four inches square, inserted, on the one side upon the neck of the radius, and on the other, upon the inferior margin of the lesser sigmoid cavity of the ulna. He calls it *ligamentum quadratum radio-ulnare*; it is supposed to limit the movements of pronation and supination.—*London Lancet.*

## PROFESSIONAL RESIGNATIONS AND APPOINTMENTS.


We learn from the city presses, that Prof. E. Brown Sequard has resigned the professorship of institutes of medicine and medical jurisprudence in the medical college of Virginia—thus bringing to an abrupt close his connection with the college and his residence in this country.

We also learn, from the same source, that Dr. L. S. Joynes of this state, a member of the board of visitors of the college, was appointed to fill the chair vacated by Dr. Sequard. Also, that Dr. A. E. Petticolas, for some years past the demonstrator of anatomy, has been appointed to the professorship rendered vacant by the death of the late Dr. Carter P. Johnson.

There are various contradictory rumors as to the causes and circumstances of this sudden withdrawal of Prof. Sequard, whose election and arrival were announced with such a flourish of trumpets some time since. We have no doubt our readers would be glad to have the mystery cleared away which now envelopes the affair.


In connection with this matter we presume the profession feel some curiosity in regard to the sudden appointment of another member of the board of visitors to a chair among the faculty, and that too without public notice of its vacancy, or even the *usual form* of invitation to aspirants for professional honors. Probably some curiosity may be felt in regard to the nomination by the power behind the throne for the vacancy in the board of visitors. We hope this curiosity may be gratified. B.

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 We apologize to our subscribers for the lateness of the issue of this number. It was delayed for the purpose of giving them an early notice of the proceedings of the Medical Society of Virginia, in which they, we felt confident, would be interested.

Our official connection with this journal ceased at the time of the annual meeting, and we have gotten up the present number in accordance with a resolution to that effect.

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 Contributors will please observe the *standing rule* to write on one side of the sheet only, and to write all technical terms and proper names as plainly as possible.

May 19, 1883

# THE STETHOSCOPE.

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VOL. V.

RICHMOND, VA. JUNE 1855.

NO. VI.

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ORIGINAL ARTICLES.

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## **Report of a Case of Extensive Urinary Infiltration.**

BY F. W. RODDEY, M. D. RICHMOND, VA.

Sunday night April 29, was called to see Benjamin Jackson, United States convict confined in the Virginia penitentiary, suffering from retention of urine. The patient had led the life of a sailor, and had been infected both by syphilis and gonorrhœa, but had been entirely relieved. He had never been sensible of the existence of stricture, nor had there been any necessity for the introduction of either bougie or catheter. This was his statement, which I did not regard as at all reliable. Upon examination, I found the bladder considerably distended, but not enough so to account very satisfactorily for the suffering complained of. I immediately attempted to introduce the catheter. The penis felt, (in its central portion, probably half an inch in diameter,) throughout its entire length, preternaturally hard—in fact, almost cartilaginous, and at its root, near to and dipping down under the pubis on the right side, a very small tumor, tender to the touch, and presenting every appearance of an ordinary phlegmon. The tract of the urethra was not at all sensitive under internal pressure until it was traced fairly into the perineal locality, when moderate pressure occasioned considerable pain. Upon attempting to

introduce the catheter, a stricture was encountered at the very orifice of the urethra, which was, however, overcome by the gradual pressure of a No. 7 bougie. The instrument was then passed with considerable difficulty, after two hours' manipulation, encountering in its progress some half dozen strictures and bands thrown across the passage, up to the membranous portion of the urethra. At that point there presented itself what appeared to be an insurmountable obstacle to the further advance of even the smallest sized instrument.

My impression, on first examining the patient, was, that the obstruction at this point was due to the pressure of the small tumor already mentioned, upon the urethra, and preventing the escape of urine beyond this point. But the pressure of the instrument against this obstruction occasioned no pain whatever, which would not have been the case had an inflammatory swelling existed sufficiently near the urethra to encroach upon the diameter of that canal. Indeed, the whole course of the urethra, from the very commencement of the meatus to its membranous portion, was callous to any impression from the presence of the instrument. External pressure, however, when made beyond this point onward towards the neck of the bladder, occasioned pain. After two hours of effort to gain access to the bladder, and while I was still patiently and cautiously endeavoring to overcome the obstacle, my patient became suddenly sick and faint, sunk back upon his chair, evacuated his bowels involuntarily, and upon the withdrawal of the instrument, passed his water quite freely.

Having encountered so much difficulty, and having some curiosity in the matter, I availed myself (as soon as I could) of his then relaxed condition, and attempted again to pass the catheter. Although the urine had passed freely in his state of relaxation, leading me to hope for the existence of a spasmodic stricture, I utterly failed, meeting with the same resistance as before. The patient expressing himself very much relieved, and the urgent necessity for farther interference removed, I directed a warm hip bath, an enema of warm water, and an anodyne, and left him for the night.

On Monday, April 30, found my patient very much improved in general appearance, having spent quite a comfortable night. Pulse a little frequent, but of more volume and regularity; skin moist, and of natural temperature; tongue but slightly coated; appetite indifferent. His bowels had been evacuated by enema, and he had passed his water as usual, in ordinary quantities, but with some burning. In fact, he expressed himself with much apparent satisfaction as "feeling as well as he ever did," with the exception of some weakness, and the same *pain in the perineal region*. There was no distension of the bladder—nothing abnormal, save the tenderness about the membranous portion of the urethra, running backwards, and the preternatural hardness, (as I thought) of the penis itself. I directed buchu and spirits of nitre, and if pain should increase, the use of the warm hip bath.

From this time I saw him daily, and nothing occurred worthy of note, or that induced me to interfere in any way save the continuance for two or three days of the diuretic treatment, with hip bath at night.

On the third morning, he was passing limpid urine in *large quantities*, by the natural passage, and without scalding. The pain in the perineal region had nearly disappeared, although upon examination at that point, I found that pressure occasioned much suffering. The same little swelling mentioned as existing at the root of the penis was found unaltered, and now could be handled, and even pressed with impunity. His appetite was *good*, his bowels regular, slept well, and looked well. In fact, I considered the case progressing as rapidly as could be expected, to a favorable termination. Regarding, as I then did, the case a subacute inflammation of the neck of the bladder, extending forwards, embracing the prostatic and membranous portion of the urethra, I enjoined rest and unirritating food and drink.

Thus stood affairs on the 1st of May, the third day from the time I first saw him. Gradual improvement seemed to mark the case from this time until the Saturday following, seven

days after his admission into the hospital. Only a day or two before the 5th, he had expressed a wish to walk about the yard, which I refused. On Saturday morning I was sent for early in the morning, and upon my arrival, received from the patient this statement: He had gotten up from his bed as usual, and while passing his water he felt something suddenly give way, and his scrotum had become suddenly enormously distended, as I then saw it—the body of the penis partially, the prepuce and scrotum extensively infiltrated with urine, extending somewhat above the pubis and into the groin.

The accident had happened only an hour and a half or two hours before I saw him. His general appearance was not yet much altered; pulse a little quickened, the infiltrated tissues already very much inflamed, and extremely painful. Although he had passed a few hours before, and was passing his urine at the time of the accident, I again attempted to pass the catheter, but found it impossible. Before taking any further step in the case, and before any incisions were made in the scrotum, thinking possibly a counter opening posterior to the point of obstruction might be advisable, I asked Dr. Bolton to see the case with me. This he did within a few hours.

The catheter was again attempted to be introduced, but a failure was the result. Free incisions were then made three or four inches in length, three in number, each side of the scrotum, passing entirely through the subcutaneous cellular tissue. From these openings the urine passed freely. Punctures were also made along the penis and in the prepuce. The catheter was *again* attempted to be passed, but without success. The patient passed his water in small quantities at a time, but sufficiently free by the natural passage.

In view of this fact, it was thought better to delay, at least for the time, the performance of any operation to gain access to the bladder. A bran poultice saturated with laudanum solution was applied; opiates, liberal diet and moderate stimulation were enjoined.

On the following morning, (May 6th,) we found the patient doing much better than we had anticipated. The counte-

nance presented rather a haggard and anxious expression; pulse frequent, but with sufficient volume; skin *rather* cool and moist; suffering but little pain; had passed his urine through the natural passage; little or no drain from the right side, and none from the left; and the distension from the presence of urine had entirely subsided, although considerable inflammation through the whole scrotum existed then—and presented a very dark appearance at the incisions, especially on the right side.

It may be well to mention here, that at the time these incisions were made, the tract leading to the opening from which the urine escaped, could be traced from the cut over the right testicle upwards and backwards towards the posterior part of the urethra, although the probe could not be passed into that canal from this opening.

The fact of his passing his urine at regular intervals along the natural passage, induced us again to defer any cutting operation, or at this time to attempt to pass the catheter. Sustaining diet and stimulation were continued.

On the morning of the same day, found no change; and continued treatment. On the following morning, (May 7th,) thought the patient much improved; less general inflammatory action in the scrotum; a distinct inflammatory line defining the extent to which sloughing would involve the tissues; and it indicated a more limited destruction of the scrotum than we had reason to anticipate. The patient passed his water freely through the urethra, and none passed through the wounds in the scrotum; some tenderness still remained in the perineal region; pulse somewhat frequent, but of sufficient force; appetite bad, and tongue presented a rather dirty whitish sticky coat. Continued treatment.

Just at night of the same day, (7th,) I was summoned to see him. I found him suffering great pain, with frequent pulse; anxious countenance; and upon examination of the parts, I found the scrotum in the same condition as I had left it in the morning; but to my very great surprise, I found nearly the whole right half of the body, extending from the

pubis up to the arm pit, and laterally from within three or four inches of the median line in front, entirely around the vertebral column, passing down over the glutæi muscles, infiltrated with urine, and in a state of high inflammatory action.

Here was a state of things as unexpected as it was appalling; and when taken in connection with the statement of the patient, that he passed his urine freely by the natural passage, rather difficult of explanation. That he had passed his urine freely since the occurrence of the first infiltration, I have reason to know, but whether there has not been retention within the twenty-four hours next preceding this second infiltration, I have no means of determining, beyond the patient's own statement, which I have the best reason to know was not always to be relied on.

But to the case as it now stood: The extensive infiltration of urine mentioned had taken place, inexplicable as it really did seem to be; and although the case was now hopeless, almost beyond a peradventure, yet any measure holding out even the slightest prospect of saving life, or even mitigating suffering, should not be neglected.

Upon consultation, it was agreed upon to make very free incisions down through the superficial fascia at two or three points of the part affected; and then, by a counter opening made in the urethra posterior to the point of obstruction, to secure access to the bladder, and the introduction of a tube, thus affording a *guarantee* against further infiltration.

The patient manifesting so much nervous excitability, it was thought advisable to administer ether, which was accordingly done.

Upon introducing the sound as a guide to the knife in making the incision, that instrument passed with some difficulty *into the bladder*. This unexpected introduction of the instrument of course superseded the necessity of the operation about to be performed. An elastic catheter was then introduced with some difficulty into the bladder, and retained by the usual method. The incisions on the infiltrated side were then made, and suitable dressings applied.

In some short time after the completion of our arrangements for the patient, he recovered from his insensibility, and manifested great restlessness and symptoms of delirium; pulse quickly became rapid and feeble; skin cool and clammy. He was then stimulated freely; and after remaining with him about an hour, considerable reaction came on; and then directed an opiate, and left him, with directions to continue stimulation, if reaction did not fully come on, or if there was any lagging of the powers of the system. These directions were left with Dr. Clopton, an intelligent physician, who acts in the capacity of steward to the penitentiary hospital.

I saw him again in three or four hours, and learned that he had slept quietly for about two hours; was then again seized with nausea and vomiting, and sinking of the pulse. I found him tossing from side to side; features sunken; pulse rapid and very feeble. I again attempted to rally him by stimulation and the application of mustard plasters. He retained nothing on his stomach.

I again saw him about seven o'clock in the evening, and found him rapidly sinking. He died at eight o'clock of the 8th, ten days from the time I first saw him, and four days from the occurrence of the first appreciable infiltration.

*Post mortem.*—A blackened tract of infiltration running up over the pubis, and spreading itself out under the superficial fasciæ over the right side of the body, extending as high as the arm pit and as low as the nates, and laterally as far as the spinal column. This tract became narrowed and somewhat fistulous as it approached the urethra, into which it could be traced by the probe. The bones of the pubis were then sawed away, and the bladder and penis, together with the scrotum, removed entire. Upon laying open the urethra, several strictures were found in its course—a prominent one immediately at its membranous portion. Some quarter of an inch or more behind this point, in the membranous portion, was found a small orifice connected with a fistulous tract, passing off at a very acute angle with the urethra—in fact, passing immediately beneath it for about an inch and a half

before it dipped down, and was lost in the loose texture of the scrotum. From the same opening in the membranous portion passed off another fistulous tract rather in the direction of the bladder, passing but a very short distance under the membranous portions, and then passing off into the soft parts, which had been mutilated in the removal of the penis, bladder, &c. This tract was evidently continuous with the one traced over the pubis, and formed the complete fistulous passage through which the probe was introduced from above into the urethra when the parts were in situ. The bladder was healthy, and the mucous membrane of the urethra showed no symptoms of recent inflammation, except at the very small opening found in the membranous portion. But under the urethra, beneath the fascia, and connecting these two fistulous tracts mentioned, was a softened, discolored mass, presenting the same appearance exhibited by the artificial passages above mentioned.

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## Contributions to Practical Medicine.

BY SENEX.

### DROPSICAL ACCUMULATIONS.

I do not propose a disquisition in general on the nature, varieties, causes or treatment of these affections. This would present too broad a theme, involving controverted points and speculative opinion. My remarks shall be truly practical, and as brief as is consistent with proper perspicuity. I do not propose any attempt at novelty or originality, but simply a presentation and elucidation of a single practical point which it seems to me has not been sufficiently dwelt upon by authorities within my reach, or appreciated by practitioners with whom I have been thrown in contact. When, from the operation of any cause, whether by obstruction of the circulation, or the loss of equilibrium between exhalation and absorption,

or deterioration and impoverishment of the circulating fluid—when, by the action of these or any other causes, the phenomena of dropsy are presented, the general tissues flooded, or the shut cavities distended with fluid, impeding the functions and threatening a termination of life, two questions immediately present themselves to the consideration of the practical man:

1. Through what channels and by what expedients can the accumulations be gotten rid of, with most safety to the patient?

2. How can their re-formation be prevented?

This latter question, involving the whole subject of causes, and by far the most difficult and important problem to be solved, does not come within the scope of my present design. The first is subordinate in importance to the second, only on account of the greater difficulty realized in the solution of the latter. The first step is to get rid of these accumulations and their consequences, and to this point only shall I address myself; and if the other is touched upon at all, it will be in a manner altogether incidental and suggestive. Medicinal agents can contribute to the removal of dropsical effusions only by virtue of their power to increase absorption and elimination from the system through the excretory process. The kidneys and bowels are the organs to which these remedies are almost universally directed; and it is by increased action on their excretory surfaces, that the elimination is effected. It is rather an unusual thing to meet with a case of dropsy of any standing, which has not sustained repeated broadsides of the whole artillery of hydragogue cathartics and diuretics superadded to the prolonged constitutional effects of mercury given with reference to its power of stimulating the absorbents. I am satisfied, that during a great portion of my professional life, I have erred in the too indiscriminate adoption of these methods of treatment; and my observation of the practice of others inclines to the opinion that I have not been singular in this fault. Dropsy usually depends upon deep seated disease, with structural changes in some viscus—as

the lungs, the heart, the liver, or kidneys—changes which are beyond the reach of medication. When it depends upon subacute inflammation of the investing membrane of a cavity or viscus, then some rational expectation may be based upon the mercurial action; but such treatment is conceded to be very unfortunate in, for example, tubercular degenerations of the liver. But it is not the object of this paper to decry the use of mercurials or hydragogue cathartics and diuretics in dropsical affections. These are of known value in proper cases. I only desire to caution against indiscriminate mercurialization and gut scraping, and mainly to direct attention to the skin as an avenue through which dropsical accumulations may often be removed with sufficient expedition, and with least cost to the patient's constitutional powers.

It appears to the writer, that modern authors, with a single exception, have not attached sufficient importance or dwelt with proper emphasis on this great secreting surface, in describing the remedial expedients to be resorted to in dropsical effusions.

Dr. Graves of Dublin, in one of his clinical lectures at the bedside of a dropsical patient, holds the following language: "I then, by way of trial, gave him an electuary, containing some diaphoretic medicines, and found that it acted well on the skin, and that sweating could be easily induced. *This furnished me with a key to the after treatment. Whenever you find that sweating can be easily brought on in dropsical cases, you should obey the hint given by nature.* You should not, under such circumstances, have recourse to mercury or hydragogue purgatives or diuretics. You are to open the passage which nature has pointed out. You are to encourage diaphoresis, and you may rely upon it that you will in this way effect an easier, safer and more permanent cure than you could by any of the various modes employed for similar purposes."

It is to illustrate this idea, and to enforce the practical text of this eminent practitioner, that I attempt this paper. Within a dozen years, some very striking exemplifications of its truth and value have presented themselves in the sphere of

my professional duty. Perhaps my object could not be better effected, than by giving an abstract of these cases.

CASE 1.—In September 1844, I was called to see Mr. J. aged 44. Until the preceding twelve months, he had been engaged in active business pursuits, and always enjoyed good health. On seeking his history, I ascertained that it was a year since he was first induced to seek medical aid on account of palpitation and disordered state of the heart. His physicians had diagnosed, and I have no doubt correctly, serious organic disease of that organ. Four months previous to my seeing him, his general health had greatly declined. Dropsy, commencing in the face and upper extremities, had gradually extended to the whole body. I found him propped in bed, utterly incapable of assuming the recumbent position. Dyspnoea so distressing that no refreshing sleep could be gotten. The patient then was under the salivant influence of mercury, and I ascertained that his medical attendant, from the first appearance of dropsical symptoms, had diligently alternated from hydragogue cathartics to diuretics, with only very partial and temporary relief. His bowels were very irritable, and the whole aspect of the case presenting so many features of exhaustion and irritability as to justify the apprehension that a fatal issue of the case would ensue.

Under these unpromising circumstances, I determined to endeavor to sustain his sinking powers with an anodyne for the night, and accordingly I gave him a full dose of Dover's powder. On the following morning I learned that he had slept better; his bowels had become quieted. He told me that he felt somewhat refreshed, and asked me for more of the same medicine. The Dover's powder was acting freely as a diaphoretic. Merely to please the patient, I directed eight grains of the same medicine to be repeated that morning and the following night. I had not then seen Dr. Graves' lectures—and I frankly own that the idea of getting rid of such accumulations through the skin had never occurred to me.

At my next visit, on the following day, I found the aspect

of the case decidedly improved, and the patient giving utterance to expressions of decided relief. The diaphoresis was going on with considerable activity. I then directed eight grains of the Dover's powder, to be repeated every eight hours. This plan was pursued for about ten days, when the intervals between the doses was lengthened to twelve and then to twenty-four hours. By the agency of this simple agent, this patient was entirely relieved of all his dropsical symptoms. He took no other medicine after I saw him, except lac. sulphur, which was directed when the Dover's powder was discontinued, in such portions as would keep the bowels in a soluble state, and at the same time maintain some diaphoretic action. This patient lived two years after the treatment in tolerable health, with no return of his dropsical symptoms. He finally died very suddenly of the heart affection.

CASE II.—In May 1846, I was called to see Mr. N \* \* \* a farmer, aged sixty-seven. I obtained from the family the following history of the case:

About two months previous to my seeing him, after prolonged exposure to wet and cold, he suffered severe catarrh, from which time his health rapidly declined. I found him greatly reduced in strength; face and extremities œdematous. Some cough, considerable dyspnœa, greatly increased by the recumbent posture. The indication of effusion in the chest was well marked. This patient had taken freely of calomel, followed by cream of tartar, before I saw him, but without well marked relief. Recollecting the incidents of the case above narrated, I determined to give him the benefit of the diaphoretic treatment. This plan was at once instituted, and at the end of two months, the sudorifics having been followed by vegetable tonics, he was discharged, entirely relieved.

CASE III.—In September 1847, I was consulted in the case of Mrs. \* \* \* aged 46. She had been a long time in bad health, having suffered repeated severe attacks of intermittent and remittent fevers. She was very feeble, anæmic, hysterical and confined to bed. She was in a state of general

anasarca; and this condition had persisted for several months, without benefit from repeated trials of hydragogue cathartics and diuretics, followed by nutritious regimen.

This patient had no special local distress, and I could discover no notable evidences of any particular local disease. Her general health and powers seemed broken down. The failure of repeated trials of diuretics to excite any responsive action, had led to the belief that her symptoms were of renal origin. Her bowels were very irritable, and the operation of purgatives very distressing. Her skin dry and harsh. Under these circumstances, I determined to make a trial of the sudorific plan, which was premised by the use of the warm bath. The Dover's powder was persisted in for three weeks with complete relief of the dropsical symptoms. This plan was followed by nourishing diet, vegetable tonics and calybeates—occasionally a laxative and alterative pill to keep the secretions in order. In about six months this patient was entirely relieved, and is now an unusually robust and energetic woman.

CASE IV.—In August 1854, I was called upon to attend M\*\*\*\* a boy aged nine years. I was informed that three months previously he had suffered an attack of scarlatina, since which time he had never been well. About four weeks before I saw him, dropsical symptoms had presented themselves. I found these symptoms very conspicuous and distressing. The whole surface was oedematous—the peritoneal cavity and that of the tunica vaginalis largely distended with fluid. The patient presented that peculiarly blanched, anemic, transparent appearance which marks dropsy as a sequela of scarlet fever. I learned that he had already been subjected to medical treatment. He had been mercurialized, and purgatives and diuretics had been freely used, without perceptible improvement. Elaterium was the last agent that had been used. I determined to endeavor to excite diaphoresis. The warm bath and Dover's powder were ordered. The desired action was soon established, and in about ten

days this child was in a most satisfactory state of convalescence, which was soon confirmed into good health.

In the report of the above cases, it is not the writer's object to encourage the indiscriminate resort to or reliance on the method of treatment successful in them. During the same period he has met with cases in which the same action could not be excited or results realized, and in which a different method of treatment was more beneficial. He believes, however, that there is a large class of cases to which the gently diaphoretic treatment is better adapted than any other, and to call attention to these, is his sole motive in offering this paper to the pages of the *Stethoscope*.

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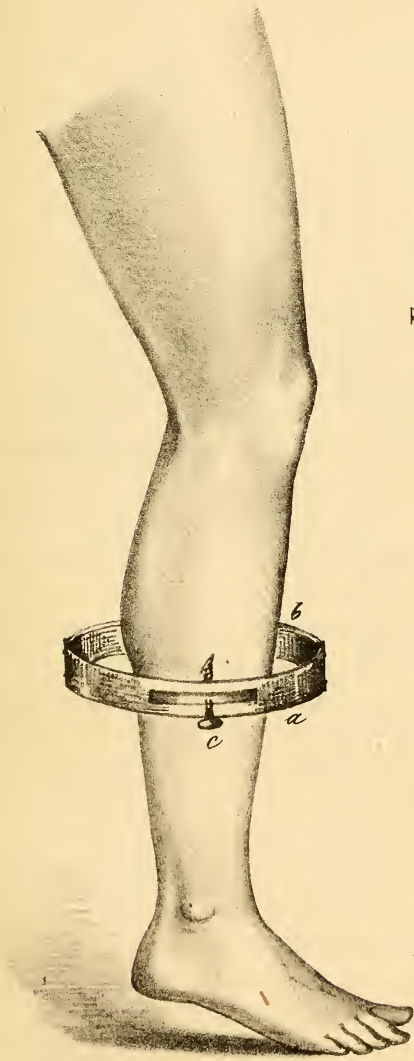
### Report on Surgical Instruments.

Presented to the Medical Society of Virginia—Annual Meeting April 24, 1855.\*

The committee on surgical instruments, &c. respectfully report, that in accordance with their previous action, approved by the society, they again issued a circular, inviting apothecaries, surgical instrument manufacturers, &c. to exhibit specimens of their skill, to the society, at its present annual meeting. They regret, however, that this invitation was responded to by only one. The firm of Messrs. Adie & Gray of the city of Richmond, exhibited the most beautiful and varied assortment of instruments which they have ever examined. These instruments were all from one establishment, that of Messrs. Geo. Tiemann & Co. of New York, whom we believe to enjoy and to deserve the highest reputation in regard to the temper and finish of their instruments, and their skill in adapting them to the use of the surgeon.

\* It was designed to have presented this report to the society, but owing to the lateness of the period when the instruments were opened for inspection, it was not completed in time for presentation. Owing to various circumstances, it was impossible to obtain the assistance of the other members of the committee in preparing this report.

J. BOLTON, *Ch'n of Com'ee.*



*A new instrument to screw down protruding portions or splinters of the tibia in fractures.*

*Explanation*  
*a, is a steel bow of broad clock spring*  
*b, is a strap to go round the leg below the splint*  
*c, is the screw rounded smooth conical point to hold the protruding bone in its place.*

*Wm. A. Ritchie & Deane, Richmond, Va.*



The following is a description of the instruments exhibited, together with such practical suggestions as may have occurred to your committee in the course of their examination. It gives us pleasure to inform the profession, that an arrangement has been entered into between the manufacturers and their agents, by which every article is marked with the retail price by the former, and sold at the same price by the latter. The prices in Richmond are therefore precisely the same as those of the same articles at the factory in New York.

*Malgaigene's bone adjuster.*—This instrument consists of a steel bow about twelve inches in length, and having a cord of seven inches. To its end are attached a strap and a buckle. The entire length of the bow and strap is sufficient to encircle the largest part of either limb. Through the centre of the bow passes a screw about three inches long, which tapers off about one inch more, to a sharp point. The design of the instrument is to force into place a fractured extremity of bone which protrudes or rises out of place, so as to prevent the extremities from being kept in apposition. The bow and strap are made to encircle the limb, over the protruding bone. A small incision is made down to the bone, and the screw point is made to rest upon the displaced fragment, which by turning the screw it is forced into place. We give a drawing of the instrument, showing its application.

*Artificial leech and cupping apparatus.*—The leech is made of two blades, one shaped like a lancet blade, about one-eighth of an inch wide, the other is of the width and shape of the first, divided equally in a longitudinal direction. The straight edge of the second blade is applied at right angles to the middle of one of the sides of the first. These blades make incisions into the skin resembling very much the cuts of a leech bite. They are attached to a stout wire and the whole is enclosed in a small cylinder containing a spiral spring, so arranged as to operate upon the scarifier. By means of this little instrument, the surface may be rapidly scarified at various points. Suction is accomplished by means of vulcanized caoutchouc cups, which are tied over

one end of a glass cylinder. A wooden cylindrical piston which fits loosely into the caoutchouc cup, is pressed firmly into it. The edge of the cup is applied to the skin and the cylinder withdrawn. These caoutchouc cups are rather easily destroyed, but are readily replaced, and having a sufficient supply, the apparatus may always be kept in working order.

We especially commend it to physicians who are so situated as to be unable to procure leeches.

*Waters' breast pump.*—This consists of a cylinder of caoutchouc inclosing a spiral spring, by which it is always kept extended. At one extremity is a valve like that of a pair of bellows, at the other is a hollow glass spheroid, with a broad flange, which is applied to the breast. By compressing the cylinder lengthwise the air is forced out, and powerful suction exerted upon the breast. It is a very convenient, excellent instrument.

*Stomach pump, &c.*—In regard to construction and completeness in all its details, this is the most nearly perfect apparatus we have seen. The following is a list of articles in the case: The syringe is arranged according to the plan of that commonly known as Weiss', viz: the cylinder is of brass, with two nozzles attached, at right angles to each other. The direction of the fluid through these nozzles is regulated by means of a cock, which is worked by a lever on the side of the cylinder like the key of a flute. We notice a very useful improvement in this part of the apparatus, consisting of an indicator of brass, having the word "shut" stamped upon it. This moves with the cock, and points to the nozzle, which is closed. The stomach tube is remarkably well made, with a bulbous extremity to avoid injury to the stomach and large fenestræ, which are less liable to be clogged by the contents of the stomach. By means of this apparatus, fluid may be thrown into the stomach in any quantity, and then pumped out, simply by reversing the movements of the cock, without detaching the pump.

*O'Beirne's rectum tube*, for throwing enemata into the colon above the sigmoid flexure.

*A vaginal tube and suitable rectum nozzles.*

*Bowditch's trocar for hydro-thorax.*—This is a very small sized trocar, nearly the size of that used for exposing tumors. The canula, which is of silver, is fitted to an elastic tube connected with the pump for injecting fluids into the pleural cavity.

*Simpson's uterine dilators.*—This case consists of fourteen short metallic bougies of different sizes, with one long handle, upon which they may be screwed. In contraction of the os uteri, the largest sized bougie is passed which the orifice will admit, and being slightly conical, it dilates the aperture as it passes in. Each bougie has a shoulder, which prevents it from passing so far as to do injury to the upper wall of the uterine cavity.

*Wilde's ear instruments*—Consisting of silver ear specula of a conical form, of two sizes, and one of a hemicylindrical form; well formed forceps for removing foreign bodies from the ear; a canula of peculiar construction for the removal of aural polypi, an admirable instrument for the purpose; a probe bistoury, &c. for operations upon the external ear and a porte caustique of elastic silver similar to Lallemand's, for applying solid caustic to any part of the external meatus or to the tympanum itself.

*Tiëmann & Co.'s tracheotomy forceps, trocar for tapping the bladder above the pubes or through the rectum, and ear speculum.* This set of instruments exhibits peculiar ingenuity of contrivance, adaptation to the purposes for which they are designed, and beauty and delicacy of construction. They consist of a small bivalve speculum, with a flat, thin trocar, which may be placed between the blades, and firmly grasped by them. The trocar is thrust into the trachea without any previous incision. It is then removed, and the speculum is left in the wound. The blades are kept open by a screw, and they serve the purpose of a canula; or a canula intended to be worn by the patient may be conveniently passed between the blades; and the latter may then be withdrawn. This instrument is peculiarly well adapted to Marshall Hall's treatment of epilepsy by tracheotomy.

*Trachea tube improved by Buck & Minor.*—This is made double—one tube fitting accurately within the other, and being retained in place by a turn button. By this arrangement, the inner one may be removed and cleansed without the annoyance to the patient and operator of removing and replacing the instrument through the wound. Both tubes have fenestræ in their upper convex side which allow a communication with the larynx above.

*Parker's compact case.*—This consists of about fifty pieces, contained in a neat, strong rosewood case, so compactly arranged that the case measures on the outside only thirteen and three-quarter inches in length, five and seven-eighth inches in width, and three and a quarter inches in depth. The case contains a complete set for amputating, trephining, lithotomy, including two silver catheters, tapping for dropsy, exploration of tumors, removal of polypi, tenotomy, operations for cataract, strabismus and hernia, besides various minor operations.

*Hardy's chloroform vapor injector, for producing local anæsthesia.*—This consists of an elastic bag, attached to a brass tube containing a piece of sponge, and having three apertures. One of these is for the introduction of chloroform to the sponge—another is for the admission of air, and is guarded by a valve opening inwards—and the third is the jet for the expulsion of vapor. An elastic tube for directing the jet to the uterus accompanies the instrument. The value of this method of producing anæsthesia is involved in doubt, which we have had no opportunity of settling for ourselves. There is sufficient evidence, however, in its favor, to enable us to advise its trial by the profession. If further experience shall prove that a portion of the body may be rendered completely insensible, without the risks of inhalation—in fact, without the slightest risk of any kind, then will the anæsthetic art have to that extent reached its perfection.

*Toynbee's otoscope.*—This instrument consists of an elastic tube, with a nozzle at each end. One of these is to be inserted into the ear of the patient, and the other into that of

the operator. The patient then having taken a full inspiration, and having closed the mouth and nostrils, attempts to blow. If there be an entire closure of the Eustachian tube, of course no sound is produced. If there be an aperture in the tympanum, the air will be heard whistling or blowing through it; and if there be fluid in the cavity, a gurgling sound will be heard. It is a very simple and useful instrument in the diagnosis of that obscure class of diseases, in the treatment of which the inventor enjoys a well earned reputation.

*Toynbee's artificial tympanum.*—This is made of extremely thin coutchouc, and is intended to be pressed down to the position of the natural organ, when that is perforated or destroyed. It is a more delicate substitute than the flock of cotton, and is said to produce an immediate improvement of hearing in some instances. It seems to us, however, that while it is certainly more elastic than the cotton, the latter possesses the advantages that its fibres may be entangled in the rami of the stapes, and thus act directly upon the internal tympanum (as it may be called) upon which that bone rests, and the cotton can always be kept at hand, and replaced with facility.

*Instrument for strangulating uterine polypi.*—This consists of a pair of long forceps, with fenestrated blades, which may be applied separately, and then keyed together. By pressing the handles, the strangulation is effected. The handles are then secured, and the pressure regulated by a ratchet spring. We regard this as an admirable instrument.

*Forceps for removing foreign bodies from the pharynx and trachea.*—One of these, especially, is of very simple and beautiful construction.

*Simpson's graduated uterine sound.*—A steel sound very similar to that used in lithotomy, with a probe end, and so marked that the distance which it may be introduced can be ascertained with much precision.

*Stuart's porte caustique.*—Similar to that of Llalement, with the exception that a sponge for holding a solution of the ni-

trate of silver, is attached to the wire stylette, instead of a cavity for holding the solid caustic. This instrument is designed for the abortive treatment of gonorrhœa, and is a favorite method with some surgeons.

*Self closing artery forceps.*—The blades of this instrument cross each other, and are kept together by strong springs. They are curved also with a long sweep, so as to seize several small arteries at one time. They may be used as an aneurismal needle to carry a ligature around an artery, and answer the purpose very well of entropium forceps.

*Self closing uvula forceps.*—Similar to the last, for holding the uvula during the excision of a redundant portion.

*Ruck's folding sponge holder.*—A very convenient instrument to be used as a probaug. It folds into a very small space, and the sponge may be replaced by a fresh piece as often as may be desired.

*Nott's tonsil scissors.*—These have broad, strong blades, with the outlines of the edges concave, so that as they close the points pass each other first, leaving at the moment a fenestra between the blades, enclosing the base of the tonsil. The blades are curved flatwise also, with the convexity towards the base of the tonsil. The tumor, when excised, is prevented from falling into the posterior fauces by two pairs of claws attached to the concave surfaces which seize the tonsil and retain it upon the scissors. The extremities are broad and blunt, so as to avoid all risk of wounding the surrounding parts. Without experience in its use, we think very favorably of this instrument.

*Chloroform inhaler.*—This is so arranged as to cover the mouth and nostrils—to hold a piece of sponge, and protect the face from the irritating effects of chloroform. It has two apertures, closed with light ball valves, the one for the entrance, and the other for the exit of air. Within the former, a piece of sponge for holding chloroform is placed, partly covered by a piece of metal, which acts as a shield to the mouth, protecting it from contact with the stimulating liquid. We confess that we prefer, to all the inhalers we have seen, a

simple piece of sponge enveloped in a cambric handkerchief, which may be gently drawn over the bridge of the nose, and closely applied so as to protect the eyes against the irritation of the vapor.

*Tiemann's three valve speculum.*—When closed, the extremities of the blades are in contact, and thus the plug is dispensed with. By compressing the handles, the walls of the vagina are stretched apart around the mouth and neck of the uterus. The direction of the surfaces enables them to reflect the light with more than usual accuracy upon the parts to be examined.

To be concluded in our next No.

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### American Medical Association.

In the New Jersey Medical Reporter for May, I find, as the leading article, "Remarks on the American Medical Association, by one of its members"—in which the writer contends, that although the association has not, in the seven years of its existence, accomplished the reforms in medical education which it contemplated, and which was the chief object of its institution, yet the writer contends, that these seven years have been only the seed time; that the good seed have been sown, and that in good time we shall reap an abundant harvest. I earnestly hope, and would gladly believe, that these sentiments are correct; but when I look at the past, my forebodings, in regard to what this body will accomplish, as it is at present constituted, are rather gloomy. For hitherto, when we asked of them bread, they have given us a stone. And I propose at present to analyze some of the foundations upon which these opinions are based.

First, then, as evidence, we have the following:

"Whoever has supposed that such a vast variety of mind as is annually assembled in the national association, could be

at once made to harmonize on all these details, certainly possessed but little knowledge of human nature. Still, in regard to this, much progress has been made. The leading principles have been agreed upon, and universally acknowledged. The proper seed has been sown, and it is evident from the annual address of Dr. Wellford, to the meeting in New York, the report of Dr. Cabell to the meeting in St. Louis, and still more from the recent comments in the medical periodicals of the country, that it has taken root, and is already springing up and progressing to maturity."

Now, let us see what evidence of the good seed, sown in the address of Dr. Wellford, affords. We are in the habit of judging of men and of associations *more by what they do than by what they say*. Now, what Dr. W. says in his address upon this subject, is not only eloquently and handsomely said, but would seem to evince that the good seed had not only taken root in his own mind, but that his earnest desire was to scatter the same good seed broad cast over the whole land! But what effect will the liberal spoken sentiments of this address have upon the medical community, when they see the gentleman who gave utterance to these liberal sentiments of reform, even while his own words are sounding in his ears, have a noble opportunity presented to him for carrying into effect these principles, just now so eloquently advocated, fail in making a single step of progress of any practical utility in medical reformation. This opportunity was first presented to Dr. W. when the medical college at Richmond was reorganized, and he was made one of the trustees, or a member of the board of visitors. A second opportunity was offered him, when he was taken from that board, and made a professor in the school. In what degree do we find his actions in unison with his words? Which of the measures for medical reform have been carried into effect? It is true that the length of the college session has been lengthened a few weeks. This is the grand result! But has the school come up to the recommendations even of the American medical association? Is a good preliminary education required before a student can enter the school, or

any certificate from a preceptor required, or even any degree of medical information? Or is the standard of requirements for the degree of doctor of medicine of a higher order than it has hitherto been?

I do not assert that Dr. W. could have made all these changes, but where have been his efforts to do so? Has not his course of *action* rather been in opposition to medical reform, by uniting with and becoming a part of an institution, if not avowedly the enemy of all practical reformation, is one which at least does not come up even to the gentleman's own standard, or that of the American medical association. I must, however, do Dr. W. the justice to say that he is *yet* we believe, *in the abstract*, in favor of medical reform, but believes its *practical application* would prove ruinous to the medical schools.

What, then, is the evidence which is educed, or how can we entertain hopes of a good harvest from the seed of even such fair and beautiful appearances, when we find that, even in its native soil, what appeared good grain, has degenerated, and we only reap a harvest of chaff. But our text says we derive still stronger evidence that these seed have taken root, "from the comments in the medical periodicals of the country." This, I am glad to say, is an evidence that the good seed has in some degree taken root in the medical community at large; for these journals, most of them being the speaking trumpets of the medical schools, although at heart opposed to the whole scheme of medical reform, except in the abstract, fear to outrage public sentiment, by openly opposing the principle. But while they appear to advocate them as long as they remain mere abstractions or impractical Utopian schemes—once let them assume a practical form, and then what support do we get from nine-tenths of the medical journals?

Again: Our writer says, "In the absence of all legislative aid, it is evident that the only instrumentalities on which reliance can be placed, are, first, the moral and intellectual power, or influence of the national association; second, the various state and local societies; and third, the medical colleges."

First, then, as to the influence of the national association, as it is at present constituted, in bringing about these reforms, we have little confidence; for it is now almost a convention of medical teachers, who, like their journals, will proclaim the necessity of medical reform, and eloquently discourse of it as an abstract idea, but whose every act shows that they are in principle and interest totally opposed to any action in the premises. And as I have said that this association is mostly composed of medical teachers, of course what I have said about it is equally applicable to the medical colleges, with some few noble and honorable exceptions.

But I have some faith in the action of the various state and local societies; for I believe the sense of the general medical community is in favor of practical medical reform; and *I* believe that the urgent necessity for action will be perceived, and that the practitioners throughout the country will sacrifice something to attend to the meetings of the national association; that it will be reorganized, and that the present medical schools will be forced to come into measures, or they will be destroyed, and others of a higher order and more liberal views, will take their places.

The remarks which I have made concerning the Virginia medical school, and the course of one of its professors, have been dictated only by a spirit of just and fair criticism.

This school is no longer a private enterprise, but a state institution, endowed with state funds, and therefore legitimately the subject of scrutiny and criticism to every taxpayer in the commonwealth; and more especially, to the physician, because it is one of the sources from which the ranks of the profession are recruited.

ÆQUUS.

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EDITORIAL.

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THIS journal owes its origin to the want practically felt by its projectors of an available vehicle for medical information, and channel for the interchange of medical opinion. The respectable measure of success which has already attended the enterprise may at least be cited as proof that this want was not limited to a few, or confined to the immediate locale of publication. Evidence sufficient, we take it, has already been given of a disposition on the part of medical men in this section of the Union, to foster and sustain a medical literature of our own.

Having now undertaken the editorial conduct of the *Stethoscope*, our readers are entitled to some inkling of "our idea" and of the ends we shall aim at.

The collection and diffusion of sound medical knowledge, and the promotion of its collateral and kindred sciences, shall be our object in chief. For its accomplishment we can promise due diligence, but shall constantly feel our dependence upon the intellectual backing of our professional brethren. If we can enlist a tithe of the talent now engaged in the field of observation, and persuade it to a record of its rich and varied experience, thus making our monthly its articulate voice—then we are sure our labor shall not be in vain.

We tender our pages to all earnest and practical thinkers, engaged in search of the mutilated limbs and scattered fragments of truth. By discussion, if needs be by controversy, we would have its torch shaken until freed of all that obscures the purity of its flame. In this age of free investigation and enquiry, of motion and progress, and popular delusion and mental jugglery, when precedent and authority and all antiquities are ignored, there is absolute necessity for the sifting winds of discussion.

We believe that controversy is almost a necessary element in every successful scientific investigation. It matters not whether the contest is carried on with one's self or another, but the moment we pass the bounds of the most palpable demonstration, we enter upon a world of probabilities. Facts, arguments, difficulties are arrayed on either side, and it requires the best trained faculties to preside at the inquisition of truth. The medical man is sensible of this conflict at every step of his professional life. He is continually called upon to act on the preponderance of probabilities where important interests are at stake. Callous indeed must he be, if he does not often realize the agony of doubt.

If all the facts, and arguments and phenomena have not been thoroughly sifted and canvased; if there has not been a controversy in his mind over these, he will have to endure a controversy with his conscience. And this is the ground of our plea for the thorough and frequent discussion of medical doctrines. The interests at stake are too momentous for heedless decision.

We have, then, no sympathy with those who deprecate the controversial spirit, when the end is the discovery of truth. Conflict of mind with mind has often elicited its clearest elucidations. The mind itself must be shaken—shaken from the incrustations of error, which petrify its energies.

We have more dread of that intellectual sleep and death, which blindly adopts the opinions of others, or passively acquiesces in the dogmas of the age.

We are for motion and progress—that progress which carries with it all that has been gained by inheritance, and still presses on to farther acquisitions.

But whilst the promotion of sound medical knowledge should be the chief object of the journalist, yet there are other subjects of scarcely subordinate importance.

The interests and rights of the profession as a class—the modes of admission to, and tests of qualification for membership—the quantum of professional knowledge, and general mental culture exacted of candidates—the regulation of our

medical schools, their professors and pupils—in fact, the whole internal polity of the profession involves questions of vital importance, which have for some years past agitated the medical mind of the country.

These we shall reserve on our card for future discussion, in which we shall speak earnestly, according to our convictions of their importance—"perhaps vehemently—but it shall be the vehemence of sentiment and not of passion."

We are of those who believe that these great interests should be regulated and controlled by the organized body of the profession, and not be made the ministers of individual ambition and cupidity, or left to the management of unprofessional corporators.

We shall endeavor to contribute our humble effort in the work of arousing the profession to a more just appreciation of its rights and wants, and of struggling up to a more efficient organization—one which will not exhaust itself with the adoption of stereotyped resolutions, and "amuse itself with wordy potentialities—abstractions which have no tangible eventualities—theories that have no practical results."

THE MEDICAL PROFESSION CAN CONTROL ITS EDUCATIONAL INSTITUTIONS, BY THE EXERCISE OF A POWER WHICH HAS NEVER YET BEEN BROUGHT INTO REQUISITION. THIS POWER IS COMPREHENDED IN THE LITTLE WORD "PATRONAGE."

*Now, that the needed reforms have been agreed upon by our national medical congress, it is high time that this potential agency was in operation for their enactment.*

LET DISCRIMINATIONS BE MADE IN FAVOR OF THOSE INSTITUTIONS, WHEREVER SITUATED, WHICH MANIFEST A LIBERAL SPIRIT *in the amplification of the courses and prolongation of the terms of instruction.*

In this manner the expense of bogus catalogues and quackish advertisements, as well as the humiliation of pimping drummers, may be saved some establishments.

We know there are those who are opposed to the agitation of those questions—men who make some puny interest or hobby the rival of the great cause of medical reform and pro-

gress—and who make those hobbies the standpoints from which they take the latitude and departure of every measure—men who oppose organization, and seek to render it inefficient, and the instrument of jollification and revelry—oppose, it “because they hope to be able to ride a sleeping leviathan when they might not be able to sit aloft on a waking one.” And another class—those who are the attachés of the former—those who, from indolence OR SOME OTHER MOTIVE, are contented with a leadership who do all the thinking—the vis inertię of the profession.

From neither of the above classes do we expect any aid or comfort, or anything else but opposition. To them we shall extend nothing but ordinary civility.

But to the liberal minded—those who are in favor of the enactment of the reforms which the best heads and hearts of the profession have recommended—those who are proud of that profession, on account of its achievements in the past, and who would exalt its destiny in the future, and who would erect higher muniments of protection around its honor—to all such we appeal for their sympathy and counsel, and the contributions of their pens, in our efforts to conduct a fair, liberal and independent medical press.





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SELECTED ARTICLES.

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## SURGICAL.

**POLYPUS OF THE IRIS.** *By John H. Dix, M. D. Boston.*  
The accompanying engraving of a vascular, fleshy-looking, fibro-plastic growth from the iris, I presume to be the only one ever presented to the profession. It is not to be found among the plates of Travers, Demours, Von Ammon or Quadri.

In the treatises of some writers—Lawrence, Middlemore, Juenchen and Desmarres—morbid growths from the iris, other than syphilitic, are alluded to, but are in no instance so described as to be identified with this, and in some are spoken of as having been seen not by the writer himself, but by others. It is the only instance of this disease within my own observation, or that of several gentlemen of this city who have seen it in consultation or otherwise.

In looking at the plate, the observer must of course imagine in front of the iris and tumor, a transparent cornea and a portion of an anterior chamber. The view here given was taken April 14, 1852, and I present it rather than one representing the disease at the time it was operated on, May 8th, 1854, when the morbid growth occupied nearly all of the anterior chamber and concealed at least four-fifths of the iris, because, should similar cases hereafter be met with, it would be the duty of the surgeon to insist upon an operation at the first recognition of the disease. At a very early period, I believe, for reasons hereafter to be stated, that the growth might be arrested with comparatively slight risk to vision.

I first saw the case April 13th, 1852, and made the following memorandum of it:

April 13th, 1852.—Miss Mary A. D., of Newburyport, æt. 21, three years ago observed, just at the junction of the iris with the sclerotic and cornea, a dark speck of the size of the head of a pin upon the iris of the left eye, on the upper and outer side. The dark spot slowly increased, and six months ago it began to present a red vascular surface. It is now of sufficient thickness to approach very nearly if not all of its anterior surface, quite to the cornea, and to press the iris slightly backward. Under the influence of stramonium the iris retracts somewhat beneath the tumor, showing that it is

not adherent to all that portion of the tumor which lies in contact with it. A dark speck in the sclerotic, near the apparent base of the tumor, suggests a possibility that the texture of the sclerotic and the choroid coat or corpus ciliare is undergoing some change. For some months past vision has been slightly impaired, the tumor encroaching somewhat upon the pupil.

No pain or unusual sensation is experienced, except that applying this eye (the vision of the right has been imperfect for many years, and the globe inverted) in reading for a few minutes, brings on an indescribable sensation, not amounting to pain, but obliging her to desist, and this intolerance of use has increased with the growth of the tumor.

Although posteriorly to the iris no trace of it is visible, it is highly probable that a portion of the posterior chamber of the aqueous humor is similarly occupied, leaving scarcely a hope of an extirpation of the whole growth, surgically, with impunity to vision. It is therefore concluded, in consultation with Dr. Jeffries, who did me the favor to examine the case, to establish behind the left ear some permanent derivative, and to give every second night—Pil. hydrarg. gr. ij, and that no close application of the eyes shall be made.

October 14.—The tumor has increased, and now encroaches considerably on the pupil. The pil. hydrarg. was continued for two months without any constitutional influence. She has sewed and read at pleasure. Four leeches to left temple, and no close application of the eyes.

I now advise the extirpation of the tumor surgically, upon the ground that it is not likely to be checked by any other means, and that the small chance of removing it without complete destruction of the globe, lessens as the growth enlarges. She declined the operation.

May 8th, 1854, a little more than two years since I first saw her.—The tumor is very much enlarged. Its base extends along at least one-third of the circumference of the iris at its junction with the cornea, and it occupies probably a space very nearly equal to the whole original contents of the anterior chamber, in as much as it presses the iris far back into the posterior chamber, while it projects towards the opposite side of the chamber within about half the normal width of the iris. The iris, however, is paralyzed, probably from the presence of the tumor, and by the excessive dilatation of the pupil a crescented margin of the pupil is left unobstructed by the tumor, and through it she still has tolerable vision.

Eighteen months ago, in view of the growth of the tumor for the previous five months, I advised an operation as a

possible means of arresting the disease, and saving her sight, either directly or by means of a secondary operation, upon the ground that with the inevitable increase of the tumor the chances of a favorable result from an operation must very rapidly diminish.

She then declined it, but now, with the understanding of the very faint hope which remains after a growth of the tumor of at least four fold, desires that it may be operated on. Drs. Hooker, sen. and j'r, of East Cambridge, and Mr. White, a student in medicine, being present, Miss D. was fully etherized. With a cornea knife I made at one cut, as in the superior operation for the extraction of cataract, a section of the cornea, concentric with and to the full extent of the base of the tumor, the knife traversing the tumor in its largest dimension. The anterior chamber was immediately filled with blood and a material of a gelatinous consistency. Of this as much as possible was evacuated, and portions of the sac excised. Dr. Shaw gives me the following account of it microscopically :

BOSTON, May 10, 1854.

DR. DIX: Dear Sir—The little tumor of the eye which you handed me appears to have been a *fibro-plastic growth* of the same structure as many nasal and aural polypi. It was composed almost wholly of fibro-plastic cells and nuclei, principally of the elongated or fusiform cells. A few blood globules, but no vessels, were seen; vessels, however, if any existed, might have been destroyed before my examination.

I think I have often seen polypi growing from mucous membranes of a structure and appearance similar to this, but it seems to me that its situation in the anterior chamber is very peculiar.

Yours truly,

BENJ. S. SHAW.

December 1854.—On the third day after the removal of the tumor, suppurative inflammation came on, precluding all hope of a recovery of vision hereafter. The vision of her right eye, formerly strabismic and neglected, has improved very much, its position is rectified, and wearing an artificial one over the left, no deformity is observable.

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The practical surgical value of this case depends upon the following considerations :

That the tumor was not malignant, is shown by its structure and by its nonrecurrence. Although its ultimate structure resembles that of some polypous growths, it was not, as its ap-

pearance indicated, of a firm fleshy texture, like true nasal or aural polypus, but a soft, gelatinous mass enclosed in a thin membrane. An encysted tumor elsewhere can often be disposed of by an evacuation of its contents once, twice or more times, with or without stimulating to inflammatory action the inner surface of the cyst.

At a very early period the soft contents of this might have been evacuated into the anterior chamber with no greater risk of inflammation than that which attends the presence in the anterior chamber of a few fragments of lens after an operation upon a soft cataract by laceration, and there is nothing to prevent the repetition of an operation in one more than in the other case, and certainly a similar prospect in both of the removal of the foreign material by the agency of the aqueous humor.

I would therefore suggest to any one who hereafter meets with this disease, to open freely through the cornea at the earliest possible period, the very thin membranous sac by means of a common cataract needle, or (which would, perhaps, facilitate a free incision of the sac with no greater loss of aqueous humor) with Langenbeck's needle.

If, from the first operation, no inflammation of the iris or globe follows, and the membranous cyst reunites with a reproduction of its contents; at the second operation, in making the incision into the tumor, the instrument might be rubbed against the inner surface of the cyst to such a degree as to produce adhesive inflammation within it, and still not compromise the integrity of the eye.—*Boston Med. & Surg. Jour.*

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PROFESSIONAL APPOINTMENT.—We observe that Henry H. Smith, M. D. has been appointed to the chair of surgery in the University of Pennsylvania, made vacant by the resignation of the veteran Dr. Wm. B. Gibson.

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#### PRACTICAL MEDICINE.

ON THE USE OF *THUYA OCCIDENTALIS*, (*ARBOR VITÆ*), IN THE TREATMENT OF CANCER. By J. R. Leaming, M. D. Physician to the Northern Dispensary, N. Y.—About the 1st of July 1854, my attention was called to a little girl, not quite three years old, who had received a slight injury of the hand, as was supposed from a fall. I directed the applica-

tion of cold water, and the swelling and the soreness disappeared. On the 12th of September I was called to see the child, and found a purple tumor, not distinctly defined, occupying and complicating the flexor muscles of the thumb. The veins leading to the tumor were enlarged and tortuous. The tumor itself was not tender, and the bone was not implicated. It had the peculiar elastic feel of erectile tumor. I learned that it commenced growing about two weeks previously. I informed the parents of my fears respecting the malignant nature of the disease, and requested a consultation. Accordingly the next day, Dr. W. H. Van Buren saw the case with me, and confirmed my diagnosis. On the 20th of September, Dr. Van Buren met me again, and explored the tumor with a grooved needle. A glutinous matter was obtained, indicating that the disease was of the colloid variety. The treatment directed was small doses of hydrarg. bichlor in tr. cinchon. co., the hand to be painted every day with tr. iodine and poulticed.

The disease rapidly increased, attacking the carpal and meta-carpal bones, the back of the hand became thickened and hard, and the veins large and tortuous. An abscess formed where the exploration was made and discharged healthy pus. Still the tumor increased in size.

Being informed by a medical friend of the successful employment of *thuya occidentalis* in a case of rapidly developed fungus-hæmatodes of the eye—the tumor gradually subsiding under its use, and returning on its intermission, but finally completely disappearing on persisting in the employment of the remedy—I determined to resort to it in this case. It was of course a forlorn hope; but the character of the disease warranted any course of treatment which offered a shadow of success. The child was accordingly put upon the use of a tincture of the leaves of this tree. In two weeks the appearance of the hand was changed; the tumor had not increased in size. In two weeks more, the disease was evidently subsiding, the tumor was smaller, the back of the hand was not so thick and hard, and the veins were not so large.

On the 29th of October, the father of the child was attacked with severe inflammatory rheumatism of the right knee-joint. The disease resisted the treatment, only partial relief being obtained from hydrarg. mass and ext. conii, tr. colchic., sem. potass., iodid., potass nitrat., etc., till the 10th of November, when the pain was relieved. At four o'clock, on the morning of the 11th, I was called to see the patient, and found that he had vomited half a pint of blood; soon after I arrived, he vomited more, making in all about a quart of moderately fresh

looking blood. I gave him fifteen drops of spts. terebinth, and sent a messenger for Dr. Geo. P. Cammann to meet me in consultation. Dr. C. soon arrived, and carefully examined the patient. We agreed upon the following diagnosis; that there was an old trouble of the liver, most probably cirrhosis, and that the hemorrhage was from the portal circulation induced by this biliary trouble.

For a few days the patient took nothing but mulled wine and beef-tea. Altered blood passed from the bowels twenty-four hours. Forty-eight hours after the first hemorrhage he vomited a small quantity of blood, and passed altered blood for thirty-six hours afterward. The bowels were tympanitic, pulse one hundred and ten, skin moist, tongue furred. The patient presented a yellowish, waxy appearance. He was directed to take hydrarg. sub. mur. one grain, and ext. taraxici twenty grains, every day or every other day, for the purpose of bringing the system gradually under the influence of the mercurial. Healthy bile was obtained in the evacuations, but there was no improvement in the patient's health. At this time, reflecting upon the case, I came to the conclusion that there was malignant disease connected with the liver. My reasons were, the appearance of the patient, the history of the case, and the history of the patient's family. His mother died when he was a child. Three years before her death a purple tumor appeared on her hand. It resisted treatment, and the hand was amputated. Six months before her death she vomited blood, and died of some internal disease. His mother's brother died of cancer of the lip. His sister vomited blood and died of some internal disease. His little daughter is under treatment for cancer of the hand.

At my next meeting with Dr. Cammann, I stated my earnest convictions respecting the malignant nature of the disease connected with the liver. Dr. Cammann believed the disease was of long standing and of a very serious nature, but that we needed further evidence to warrant us in making up a certain diagnosis.

On the 30th of November, Dr. Valentine Mott saw the patient with me in consultation. The patient at this time was very tympanitic; there was also a small quantity of fluid in the peritoneal cavity. The heart was pushed up from its normal position, so that the impulse was felt above the nipple. He was weak, tongue furred, pulse one hundred and ten, skin moist, and urine scanty.

After examining the patient and hearing the history of the case and of the family from me, Dr. Mott's diagnosis was cirrhosis of the liver with a suspicion of malignant disease.

I commenced giving the thuya in tinct. made in the following manner: The leaves and small twigs were crowded into a jar and then covered with alcohol; half a teaspoonful every three hours. The rheumatism had entirely subsided after the hemorrhage; still there was no improvement in the patient's health.

On the 6th of December, Dr. Willard Parker saw the patient in consultation with me. After a careful personal examination, and hearing the history of the case and of the family from me, his diagnosis was cirrhosis of the liver and suspicion of cancerous disease.

The patient seemed to be rapidly sinking. I increased the dose of the thuya to two teaspoonfuls every three hours, and gave in addition a mixture composed of hydrochlorate of ammonia and chlorate of potass. each  $\mathfrak{z}\text{i}$ , and cinnamon water  $\mathfrak{z}\text{vi}$ , a tablespoonful every hour or two. He seemed to improve almost immediately, his appetite became good, and he gained strength rapidly. A week after Dr. Parker saw him he was able to walk into an adjoining room and sit there most of the day. The 12th of December, I found a small tumor in the left side on a line with the heart, just under the ribs. In giving it an impulse it would leave the hand and return to it, giving the sensation of the foetus in ballotment. The tumor grew rapidly, and I could notice an increase in size at each examination.

On the 18th of December, Dr. Cammann made a careful examination of the tumor. It rested upon the kidneys, and evidently was the cause of the displacement of the heart. It extended over toward the right side beyond the median line and downward almost to the umbilicus.

There was more urine secreted than there had been; still the dropsy gradually increased. A great variety of active diuretics had been used without any beneficial effect; indeed they all seemed to do harm, consequently he was confined to the thuya and mixture of hydrochlorate of ammonia and chlorate of potash.

On the 4th of January, the dropsy having increased so much, it was decided to relieve the patient by tapping. On the 6th of January, at the patient's request, Dr. W. H. Van Buren was called and drew off thirteen quarts of amber-colored fluid highly charged with albumen. In a week he was able to walk about and ride out, driving an open carriage several miles into the country with enjoyment and benefit. With the exception of the physical inconvenience of the tumor lying on the kidneys and the portal veins, the patient seemed to enjoy better health than he had done for some years.

The dropsy rapidly returned, and tapping was necessary again in two weeks. Dr. Van Buren performed this operation five times at intervals of two weeks. After the fifth tapping extensive peritoneal inflammation set in, and the patient died on the 5th of March.

A post-mortem examination was not allowed. This is much to be regretted, as it would have settled some points of interest—the malignancy of the tumor, its connection with the left lobe of the liver, and whether the extensive peritoneal inflammation was caused by the escape of matter from the tumor into the peritoneal cavity. Of the first two points there can be scarcely any doubt; still it would have been a satisfaction to have had the question settled beyond all cavil. The third point is quite probable from the sudden onset of the peritonitis.

The most important fact in the history of this case is the decided benefit received from the use of the thuya and the mixture of hydrochlorate of ammonia and chlorate of potash. Immediately after commencing the use of these remedies the stomach and liver resumed their natural functions, and the symptoms of cirrhosis disappeared. The action of the kidneys was also much improved.

During the early part of the father's severe illness, the child was neglected and the thuya discontinued. The hand became worse, and the disease again attacked the carpal bones. When the thuya was prepared for the father, the child again commenced its use, taking fifteen drops every two or three hours. In a short time its benefit was quite perceptible. At the present time only a trace of the disease remains, and the remedy will be persisted in till the child is well. The hand will remain permanently injured and probably will be atrophied.

*Thuya occidentalis*, or *arbor vitæ*, belongs to the pine tribe (*coniferæ*), is a native of this country, and is cultivated in our gardens. The leaves are the parts used medicinally. They are described in the U. S. Dispensatory as having an "agreeable balsamic odor, especially when rubbed, and a strong, balsamic, camphorous, bitter taste."

The thuya has long been used for medicinal purposes, but with no settled opinions in regard to its therapeutic properties. It has thus been employed in intermittent fever, scurvy, rheumatism, and as a stimulant, diuretic, diaphoretic, and vermifuge. In the *Revue de Therapeut.* (Jan. 1st, 1855,) there is a notice of the thuya having been recently employed by a Hungarian physician in the treatment of venereal excrescences which had resisted mercury, cauterization, and excision. He

employed the tincture, using three pints of the leaves to six of rectified alcohol, applying it from time to time with a brush. The excrescences rapidly diminished in volume, and a radical cure is reported to have been obtained in five days.

*Thuya occidentalis* is a new remedy for cancer. There have been a great many new remedies for this dreadful disease before, which upon trial have proved utterly valueless; so it may be with this. Two or three recoveries do not prove the value of a remedy. These cases are related that it may receive a more extensive trial; and if others should find it in a large proportion of cases as beneficial as it has been in the cases I have related, it is one of the greatest boons conferred upon mankind.

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CHRONIC PELLICULAR OR ERUPTIVE INFLAMMATION OF THE INTESTINAL MUCOUS MEMBRANE.—[Professor Simpson makes the following remarks on this form of intestinal inflammation, in addition to some observations published by him in 1846, on the same subject, in the *Edinburgh Monthly Journal*. These additional remarks have not before been published.]

Since specially pointing out this disease some years ago to the notice of my professional brethren in Edinburgh, its frequency in practice has become generally recognized among us; and all, I believe, are now willing to acknowledge that it is infinitely more common than the total, or almost total, silence on the subject of all our best writers on practical medicine would, *a priori*, lead us to infer.

Acute exanthematous eruptions—smallpox, measles, scarlatina, erysipelas, &c—are usually recognized as occasionally attacking some parts of the mucous surface, as well as the general cutaneous surface of the body. And there are some specific local inflammations of the mucous membrane, which, if present on the skin, would no doubt there be termed eruptions—as diphtherite, dothinerterite, and perhaps more than one form of diarrhoea and dysentery, &c.

Chronic eruptions, however, of the intestinal and other mucous membranes of the body, have scarcely been acknowledged in modern pathology. But perhaps such chronic eruptions and irritations of the mucous surface will yet be found to be scarcely less frequent or less various in type than the well known chronic eruptions and irritations of the cutaneous surface.

Chronic eruptive inflammations of the intestinal mucous membrane are frequently attended, as stated in the prece-

ding notice, with the ejection, in greater or less quantity, of shreds or pellicles of thickened mucus, or of actual coagulable lymph, along with the usual contents of the bowels; and sometimes this pellicular effusion presents the appearance of a gelatinous shapeless mass, or of portions of a roundish or tubular false membrane, which is frequently considered by the patient as "worms." Often, however, in apparently other species of chronic mucous or intestinal eruptions, no such secretion is thrown off.

The pathological anatomy of these morbid eruptions of the mucous membrane has scarcely yet been at all studied on the dead body. In a case where, some months before death from pulmonary tubercular disease, the patient had passed large quantities of "membranous crusts or tubes" from the bowels, Dr. Abercrombie found the mucous membrane of the colon, throughout its whole extent, covered with an immense number of small spots of a clear white color, which, "on minute examination, were distinctly ascertained to be vesicles, very little elevated, but, when punctured, discharging a small quantity of clear fluid." In a case of still more chronic character, with similar pellicular discharges, which I attended with the late Dr. Wright, and where the patient died in an extreme state of marasmus, the mucous membrane of the colon and the lower portion of the small intestine was everywhere studded with a thickly set papular eruption.

The principal general symptoms which I have observed in cases of chronic mucous or intestinal eruption, are the following, in different numbers and combinations, and in different degrees of severity in different patients:

General indefinable debility and emaciation; a condition often of broken and impaired health, without any very appreciable cause; the muscular system easily fatigued and exhausted; sometimes so much palpitation as to lead to the idea of heart disease; the circulation weak, as shown by the coldness of the extremities, &c.; diminution of nervous and mental power and energy, with hypochondriasis, irritability of temper, very often impairment of the memory, sensations of prickling and semi-paralysis in the arms or legs, and sometimes lesions of sense; skin very generally dry and inactive, and in some cases eruptions appear upon it, contemporaneous with or vicarious of the internal mucous irritation. The appetite, provided the mucous membrane of the stomach itself is unaffected, may be found scarcely if at all diminished, but the patient complains of the food swallowed not producing any corresponding amount of strength or nourishment; occasionally, again, there is marked dyspepsia; often, but by no

means constantly, there is a feeling of heat and rawness in some part of the intestinal canal, and a feeling of uneasiness and distension rather than pain in the abdomen; the action of the bowels is sometimes comparatively normal or easily regulated, but they vary in other instances, both as to torpidity and irritability. The sleep is usually unrefreshing in its proportion to amount.

Direct evidence of the presence of, and tendency to, mucous eruptions, in such subjects, can generally be obtained by carefully examining the state of the mucous membrane that is within sight. Spots of eruption, and sometimes small ulcerations left by them, will frequently be detected on the inside of the lips and cheeks, and on the gums and tongue. Much more frequently the palate and throat present, more or less distinctly, the appearances of chronic eruptive disease; as likewise the mucous membrane of the nose. The tongue, with the mucous membrane lining the cheeks, is not unfrequently so swollen as to be marked and indented by the impression of the teeth. Sometimes, when thus enlarged, the tongue is whiter than usual; but in other cases we see it red and irritable; and, more rarely, one or more distinct and broad patches of eruption are seen on its surface. The mucous membrane of the mouth and throat seems often, in such cases, to be the seat of successive new crops of eruption: and the variation in the general symptoms of the patient would appear further to show that such is also probably the history of the disease on its more internal sites; those successive reaggravations being sometimes accompanied by a slight degree of chronic feverishness. Sometimes there is a kind of daily periodicity in the morbid sufferings and feelings of the patient.

The general principles of treatment are, as already stated, the same as those used in chronic skin eruptions.

The affection—particularly in its occasional periods of aggravation—is allayed by the use of lime or Carrara water, by aqua potassæ, by subnitrate of bismuth, by doses of nitrate or oxide of silver, or of oxalate or nitrate of cerium; by bitter infusions, as that of quassia, with the addition of two or three drops of medicinal prussic acid; by the cold infusion of Virginia cherry bark, &c. But these medicines act perhaps principally as local sedatives to the diseased mucous surface.

As curative constitutional remedies in this affection, I have seen most advantage from the salts of cerium, from the use of pitch pills, or capsules of tar, and from the preparations of arsenic.

The preparations of pitch or tar have always seemed to

me most useful when they produced their characteristic scarlatinoid eruption on the skin.

But most reliance ought, so far as I am able to judge, to be placed on small and very long continued doses of arsenic, as two drops of Fowler's solution, or a pill containing the sixtieth of a grain of arsenite of potass, taken three or four times a day. Either preparation should be taken with or after meals; and it is, I believe, infinitely better and safer to trust to the curative effect of the long continuance of such small doses of this remedy, than to arrive at the same result by throwing in larger doses for the same period.

After a length of time, and when the general symptoms are much abated, a more direct tonic, as quinine or iron, may be added to the cerium, pitch or arsenic. But at first all tonic remedies appear to be entirely useless, or to lead even to the aggravation of the morbid state of the patient.

The diet requires to be regulated by the usual rules applicable to dyspepsia. But animal food, in a concentrated form, is often required to sustain the strength, provided it does not irritate. Wine or stimulants very seldom are of benefit. The state of emaciation is sometimes improved by food containing large quantities of fat, as cream, butter, olive and cod-liver oil, &c. When the patient's stomach will not bear or digest such fatty matters, I have seen the daily inunction of two or three ounces of warm olive oil, into the general surface of the skin, followed by the very best effects upon the health and strength of the patient.

Most remedies will fail to produce a permanent remedial effect, unless the state of the skin be attended to, and its healthy condition restored by frequent sponging with warm water, or with warm stimulating lotions.

Lastly, external counterirritation over the abdomen seems to be an auxiliary means of almost indispensable necessity. A mustard poultice every night at bed-time forms one of the best and simplest means of effecting it; or external counterirritation with stimulating liniments, or with Croton oil, or antimonial ointment, or a strong tincture of iodine, &c., may be used to fulfill this important indication.

From the nature of my practice, I have seen the disease far more frequently in the female sex, and often in patients suffering under obstinate leucorrhœa, vaginal eruptions, and other uterine diseases. But it also often occurs in the male subject, and especially, as it has appeared to me, in men who, like clergymen and others, are subjected to an unusual amount of intellectual work or mental anxiety.

*April 1855.*

## OBSTETRICAL.

DISCUSSION AT THE IMPERIAL ACADEMY OF MEDICINE ON M. DEPAUL'S REPORT ON THE TREATMENT OF DISPLACEMENTS OF THE UTERUS BY INTRA-UTERINE PESSARIES.—After some remarks from M. Piorry, the discussion on this report, of which an abstract was given in our preceding No., p. 257, *et seq.*, was opened by M. Malgaigne, who, while admitting the zeal and talent of the reporter, regretted to find so much party spirit in the report, which more resembled the impassioned argument of a special pleader, than a plain and impartial judgment of facts. He could not consider as *repugnant to common sense* a treatment which had been practiced by Velpeau, Amussat, Simpson, Huguier and Valleix. It appeared even from the report, that in some cases the intra-uterine pessary had been useful, and sometimes it had procured instantaneous relief, showing that the symptoms were really owing to displacement, and he had often witnessed cases of descent of the uterus, where the use of a pessary had put a stop to all the symptoms; the hypogastric belt, also, by replacing the uterus, had often produced the same beneficial results. It appeared to him that the important enquiry was to establish a differential diagnosis of uterine affections; since the same symptoms were ascribed by some exclusively to displacements, by others exclusively to enlargement (*engorgement*), by others to granulations, ulcerations, etc. etc. In neuralgia of the uterus, the pessary, he thought, might certainly be serviceable. In short, the intra-uterine pessaries ought not to be entirely rejected, but their use should be restricted to cases without inflammation, acute or chronic, the instrument should be employed cautiously, and not be allowed to remain permanently; and, above all, the treatment should be controlled according to rational indications; the practitioner should know *what he does and why he does it*.

M. Huguier, who had not signed the report in consequence of differing from M. Depaul in some of his conclusions, made a full and able statement of his views. With regard to the intra-uterine pessaries, he thought that they ought not to be entirely rejected; but that their use should be confined to those exceptional cases of displacement giving rise to serious symptoms, which resist other means of treatment, that their application should be made with great caution and carefully watched. He especially commends their efficacy as emenagogues, when other means have failed. On the pathological

question, he explained the circumstances under which uterine displacements occasion no symptoms; and after distinguishing the local and sympathetic affections which are occasioned by inflammations, etc. of the uterus, he defines those symptoms which properly belong to and are occasioned by uterine displacement, particularly disorder of the menstruation, and distressing affections of the bladder and rectum, (frequent micturition, retention, obstruction of the rectum, etc.) He considers that deviations, especially ante and retro-flexion, may occasion sterility, and maintains that the displacements are undoubtedly curable. In conclusion, M. Huguier relates his experience of the general and local treatment of the displacements by pessaries, etc., and describes the methods by which he has succeeded in replacing the uterus when retro-flexed by the insertion of pledgets (*mèche*) of lint in the rectum.

M. Hervez de Chégoin was of opinion that the displacements may occasion most distressing symptoms, which are only to be relieved by replacing the organ. But this result ought to be accomplished by vaginal pessaries external to the uterine cavity. The intra-uterine pessaries had produced so many serious accidents, that he was surprised any one could follow a method attended with such risks. He considered that they ought to be altogether dismissed from practice.

M. P. Dubois denied that the vaginal pessaries recommended by M. Chégoin, could ever effectually replace a retroverted uterus; consequently, he considered the intra-uterine instruments to be perfectly rational, and indeed the only means capable of effecting the end in view. The only question was, are they without danger? It is certain that their introduction frequently gives rise to severe, sometimes even fatal consequences; sometimes the instruments cannot be tolerated; while, in some cases, they are quite innocuous, and occasionally their use is attended with immediate, or even permanent, relief. M. Dubois, however, maintains that in no instance do they ever attain their proposed object; the uterus is never replaced permanently in position by their use. This assertion he supports both on theoretical grounds, and by the result of his examination of cases treated by himself, by Valleix and by Simpson. Although, however, the displacement is never removed by this method, the uterine symptoms may be alleviated or even cured by it. These results are owing to the pessary relieving the weight of the uterus, and the tension of its ligaments; to the alteration in the morbid action, by contact when the uterus is inflamed, and to the alteration of its morbid sensibility in cases of neu-

ralgia. In the latter class of cases, the method is of particular service, and often relieves all the symptoms, even where no deviation had existed. Many of M. Valleix's cures occurred in cases of neuralgia. Consequently, the intra-uterine pessaries ought to be retained in practice, not as directors of the position of the uterus, but as modifying agents which may be placed in competition with other efficacious means already known as such, cauterizations, douches, etc. And in all cases, the general treatment should be attended to as well as the local, a principal condition to which M. Valleix owes much of his success.

M. Cazeaux expressed his opinions at great length. He objected to the report for stating the unfortunate and fatal cases, and omitting the successful ones. He admitted that by removing the displacements, both the symptoms which it occasions, and even the concomitant lesions, granulations, etc. may be cured. In opposition to M. Dubois, he maintained the efficacy of the (M. Chégoïn's) vaginal pessaries in retroversion; and he considered inflexion to be a congenital condition in the child, adopting the opinion of M. Boullard, Follin, and Verneuil. He is opposed to the intra-uterine pessary, as mostly useless and often dangerous, but he considered that the uterine sound, with proper precautions, may be rendered safe, and is of real service.

M. Gibert maintained that too much importance had been attached to uterine diseases altogether, and great illusions existed in regard to them; that they often depended on constitutional states; and he mentioned instances of several diseases of the uterus, where erroneous and overstrained views of their pathological consequences had led to methods of treatment as severe and dangerous as they were useless and uncalled for.

M. Velpeau, in one of the most important addresses delivered in the discussion, entered at considerable length into the details of the question, and opposed, in decided terms, the conclusions of M. Depaul's report. He passed a high eulogium on M. Valleix, and attached great importance to the results of his practice. He maintained that practitioners have not exaggerated the effects of uterine displacements, nor have they attributed to them those affections which resulted from other pathological conditions. Wherever disease of the uterus, enlargement or engorgement (if not mistaken for ante-flexion, as has often happened,) or ulceration, or leucorrhœa occurred, no practitioners could overlook these conditions, or confound them with the effects of simple uterine displacement. And, although there may be cases of uterine displacement,

without urgent symptoms, just as there is hardly any important organic disease the symptoms of which may not be latent, still no one could doubt the serious affections which may be caused solely by uterine displacements, and may be removed by replacing the uterus. M. Velpeau was convinced that, although these deviations yielded, in general, a favorable prognosis, yet that they produced, especially in nervous women, affections of real danger. M. Velpeau next examined the means of remedying these affections, enumerated by M. Depaul and others; and, while recognizing their usefulness in certain cases, he was quite persuaded of their radical inefficiency. In consequence of this conviction, he had himself long ago attempted the use of intra-uterine pessaries, but had desisted after a trial of a few months, being deterred more by theoretical considerations than by the results of practice. He now thought that the dangers of these pessaries had been exaggerated, and might be avoided by more careful and experienced manipulation. The intra-uterine pessaries had not indeed solved the difficulties in the radical treatment of uterine displacements, but they had already rendered great services, and would, with further experience, render more; they ought not to be rejected, but their employment ought to be regulated judiciously; and he trusted to the experience of M. Valleix to disclose the advantages and the disadvantages which belonged to this method of treatment. M. Velpeau was of the opinion that the conclusions of the report ought to be suppressed, and that the academy could only vote in reference to the cases brought forward by MM. Broca and Cruveilhier.

M. Depaul explained that the conclusions already given were merely the summing up of his report, and that he would, after the discussion was finished, submit to the academy a series of conclusions embodying the unanimous opinion of the committee.

M. Amussat said that the idea of introducing bougies (*tiges*) within the cavity of the uterus, first suggested itself to him in 1826, on seeing M. Recamier use the uterine sound for diagnostic purposes. Among the first cases in which he used the pessary was that of a woman with anteversion; he introduced a pessary with an ivory stem into the uterus, and allowed the patient to go about with the instrument *in situ*. Inflammation supervened, and the patient died. Deeply grieved in consequence of this mishap, he tried to remedy all displacements by extra-uterine instruments. He employed for this purpose conical pessaries, which resembled ivory cupping-glasses; but these were found productive of so much pain,

that he had to abandon their use. For thirty years he had used both intra and extra-uterine instruments. (Here M. Amussat exhibited to the members of the academy his various instruments—some made of ivory and steel, and others of india-rubber, elastic gum, etc.) He was discouraged, however, by the general results of instrumental treatment. He had heard of many spontaneous cures of uterine displacements, resulting from local inflammations and ulcerations having produced adhesions between the uterus and vagina, and this led him to imitate nature, and to attempt their cure by gently cauterizing the posterior part of the cervix, that by the adhesions formed by the cicatrization of the sore, the displacements might be radically and permanently cured. The successful results of this mode of treatment had far surpassed his anticipations. Relaxation of the vagina and procidentia of the uterus often rendered the application of the caustic somewhat difficult; but by putting the fingers into the rectum, and simultaneously using the sound, the position of the uterus could be sufficiently maintained during its application, and by a pessary thereafter. He related several successful cases illustrative of this mode of treatment in cases of retroversion. He had not found cauterization in the anterior lip of the cervix to be beneficial in anteversion. In such cases he used a cup-shaped pensary (*en gobelet*,) to support the uterus. In conclusion, he believed the indiscriminate use of pessaries for the cure of displacements to be prejudicial; he considered the employment of intra-uterine instruments as dangerous in some instances, and as productive of merely temporary benefit in the great majority of cases; but he characterized his own method of treatment as free from all danger, and as permanent in its results—except after pregnancy.

M. Malgaigne again spoke at great length. He agreed with M. Hervez de Chegoin, in considering that uterine displacements occasioned great pain, and also engorgements, and that these disappeared after the replacement of the organ. But he affirmed that it was impossible to recognize engorgements of the uterus apart from, and independent of, displacements. He commented, with some severity, on the statements made by Gibert, in which that gentleman had underrated the importance of uterine affections, and attributed their symptoms to general pathological conditions of the system. Referring to what had been said by M. Dubois, he alleged that neuralgia of the uterus did not appear to be a very common complaint, for although he *had* seen cases of it, they were very few in number: but he bowed deferentially to the experience of Dubois. He maintained that the pain occasioned by pure

displacements of the uterus was removable by mechanical means; and that the recumbent posture caused its cessation. This circumstance he regarded as pathognomonic of the affection. He looked upon the speculum as of little use in the diagnosis of displacements, as he had known such cases, when examined by means of it, diagnosed as ulcerations of the cervix, and treated needlessly with cauterants. M. Huguier had alleged that displacements, when trifling in amount, occasioned no pain, but herein he was in error. The suffering occasioned by displacements was by no means regulated by their extent, but solely by the special susceptibility of the patients in whom they occurred. Great prolapsus might occasion no pain, while trifling deviations of position might be quite intolerable. M. Cazeaux had said: "Congenital inflexions are seldom the cause of pain, while those occurring accidentally are always the source of suffering, which is sometimes very acute." He asked M. Cazeaux for some proof of the existence of congenital inflexions, and by what means he distinguished them from others. He could conceive of no way except saying to the patient: "Madam, have you had this inflexion from your birth?" After passing a high compliment on M. Valpeau, he made some remarks on certain portions of his address. Valpeau had stated his belief that the displacements occasioned pain in the round and broad ligaments, which he said were filled with nervous filaments derived from the great sympathetic, and continuous with the mesenteric nerves. This doctrine Malgaigne condemned as unphysiological. He did not agree with Velpeau in thinking that "no experienced practitioners could overlook these conditions." The present discussion was the best proof of the possibility of such mistakes. As to the hypogastric belt, which had been originated and greatly used by Velpeau, he affirmed that it could always be borne by patients who had simply uncomplicated displacements; and that where it was not borne well at first, it seldom was so even after usage for some time. *Can uterine displacements be replaced?* Undoubtedly, for he had seen three cases of retroflexion cured spontaneously. There was no difficulty in the replacement of so mobile an organ; and in ordinary cases, where there were no adhesions, the instrument, when introduced into it, replaced it instantaneously, and without any effort. He could not see the advantage to be gained by allowing the instrument to remain (as proposed by Simpson, Valleix, and others) within the uterus, for days, weeks, or months. What was the purpose of this? To give tonicity to the ligaments? They were not placed in their normal direction. If it was in order to

allow the intestines (which were normally interposed between the uterus and the rectum, and keep it *in situ*) time to slip behind the organ again, it was unnecessary, as this was the work of a moment. He was of opinion that the instrument for replacing the uterus should not be allowed to remain within it more than a few minutes at the utmost. *When the uterus is replaced, can we maintain it permanently so?* That was much less probable, for the organ having once been displaced, was very prone to become so again. He believed that some complete recoveries had been effected, but that in no case was a cure certain. Seeing, then, that a cure was so very uncertain, and palliation alone could be hoped for, he considered it was neither prudent nor reasonable that we should subject our patients to the risk of danger and death. He concluded thus: "I have only one word more to add, and that is this: If, unfortunately, I had to treat my wife or my daughter for a uterine displacement, I should not choose the more dangerous of two palliative measures, and most assuredly, I should not subject them to the use of the intra-uterine instrument."

M. Ricord desired to make a few remarks on the treatment of certain hyperæsthetic conditions of the cervix and vagina, which were sometimes consequences or complications of various displacements of the uterus, with or without some other morbid condition. There were many cases of displacement where the pain was alleviated or removed by lying in a certain position. He considered that much of M. Velix's success was due to his displacing and isolating the uterus from its painful position, without making pressure (*sans prendre un point d'appui*) on the sensitive hyperæsthetic parts. For a serious case of this nature, in which all the resources of therapeutics had failed in the ablest hands, and in which *considerable benefit* had been derived from the use of M. Valleix's instrument—he had invented a new instrument, whereby the uterus was isolated, supported and maintained in a suitable position, without the instrument entering the cavity of the womb, or touching the vagina. Its use was quite painless and free from bad consequences in cases where the cervix could be touched by an instrument or by the finger of the accoucheur. This instrument consisted of a forceps, which was introduced by the aid of a speculum, and the points of which seized the cervix. By means of a ring, moved by a screw, the uterus could be raised to any desired height; and the whole apparatus was fixed by means of the plate (*plastron*) of M. Valleix's instrument. In conclusion, he considered, with MM. Paul Dubois and Velpeau, as well as with M. Huguier and

with M. Malgaigne in his first speech, that the mode of treatment practiced by Simpson and Valleix was productive of great benefit, when applied to cases requiring it, and that consequently it should not be rejected from practice.

M. Robert said he rose with some hesitation to address the academy, but having been a member of the commission for whom M. Dapaul acted as reporter, he considered it right to state wherein he differed in opinion from M. Depaul. He did not, with M. Depaul, consider that the influence exercised by uterine displacement on the health of females, had been at all exaggerated. In his opinion there existed two classes of deviations—the one comprising such as were primitive, and resulted from accidental and occasional causes; the other, such as were secondary, occasioned by different lesions of the uterus, more especially of the body of the organ. The former class of cases were observed to occur thus: “A woman in good health makes a sudden or violent effort, or falls on the breach; she feels at the time a crack and a painful sensation in the lower part of the abdomen. From this time she suffers more or less pain; menstruation becomes deranged, and is either too scanty or too profuse. She consults us, and we find retroversion; the uterus is painful, tumefied, etc.” He observed that such cases should not be neglected, as they did not always remain uncomplicated, and functional disorders, as well as organic lesions, were liable to result from them. The latter class of cases followed chronic metritis, uterine catarrh, and inflammation of the cellular tissues surrounding the uterus. They occurred after protracted labors, and especially after miscarriages; and were observed in females of lymphatic temperment, in whom uterine congestion occurred without signs of phlegmasia. The fundus of the uterus was generally at fault in these cases, and was often so voluminous and heavy that it swayed backwards and forwards. In retroversion, suffering resulted from the interrupted circulation in the uterus, from the obstruction offered to the passage of feces, and from the pressure of the organ on the sacral nerves. He expressed astonishment at what had been said by Depaul and Velpeau as to the ease with which displacements might be diagnosed. He had studied diseases of the uterus carefully during the twenty years which he had been surgeon to the hôpital de Lourcine, and he still often found great difficulty in diagnosing displacements. He considered the pathognomonic sign of displacements adduced by Velpeau and Malgaigne, viz: freedom from pain in the recumbent posture and return of uneasiness on rising—applicable only to cases of anteversion complicated with procedentia (*abaissement*) and not to retroversion.

He had for a long time been in the habit of introducing dilating bougies into the cavity of the uterus, and never saw any bad effects; and he had also tried to replace the organ by means of an instrument like that shown by M. Velpeau, but without success. He also employed Simpson's pessary. He first used it in a case of retroversion which had resisted all other treatment. No evil result occurred during its use, but, on the contrary, the catamenia, which had been absent more than three months, returned in normal quantity on the fourth day after its application. It was worn for a period of six weeks, and during this time, a second menstrual epoch occurred, without any pain or inconvenience. At the end of the six weeks it was withdrawn, and he then found that the uterus had regained its normal position. The retroversion returned, however, and the pessary was again introduced.

The patient left the hospital, and went about in Paris for ten or twelve days without experiencing any pain; but feeling it uneasy after that time, she applied for its removal. Since then he had never seen her. He used Simpson's instrument in a second case of retroversion, but as it induced a continual discharge of blood, he was obliged to withdraw it on the tenth day. In a third case of retroversion, occurring in a woman of sanguine and irritable constitution, he used this pessary. He had to withdraw it, however, at the end of three hours, in as much as it caused severe uterine pains, accompanied by vomiting. He tried it again three times, at intervals of several days, but without success. He had, therefore, abandoned the use of the instrument. Although injurious results had followed the use of this instrument, he admitted that it was proved by incontestable facts, that in very many cases, where all other measures had failed, this mode of treatment had been productive of complete and lasting success. He thought that it would be premature to exclude this instrument from practice, but he considered it very desirable that its mode of action was better understood, and above all, that we knew accurately all its indications and counterindications. This knowledge would render its employment more efficacious, and would diminish the number of accidents resulting from its use.

M. Depaul then replied at great length, and maintained that his report had been impartially prepared. M. Huguier had said that intra-uterine pessaries should be used "in those exceptional cases of displacement, giving rise to serious symptoms, which resist other means of treatment." If displacements occasioning severe symptoms were rare, how much more so must be those cases which resisted treatment? He

could fearlessly affirm that such cases were hardly to be met with during the course of a long career. As regarded the use of pessaries for emmenagogue purposes, he could say that cases of amenorrhœa affecting the life and health of women were very rare, and that those which resisted ordinary medical treatment were still more exceptional. He believed that the sanguineous discharge provoked by the introduction of these instruments was *not* the catamenial fluid, but a true uterine hæmorrhage, which had been mistaken for menstruation. As to the influence of displacements upon the health, he believed that statistics, collected from a number of rigorously observed cases, were necessary to set the question at rest. He still remained convinced that there was great exaggeration in the opinions of the partisans of mechanical replacement; and he thought that he had proved this from their own observations. He had never denied that displacements or flexions might occasion sterility, and he believed this to be due to an alteration both of structure and of form. Were uterine displacements incurable? No one had affirmed this absolutely. There were a great many displacements, especially congenital inflexions, which resisted all treatment, but there were others which were easily removed. The first question he always asked himself when called to treat such cases, was: "Is the tissue of the organ sound?" If not, he tried to remedy the disease before the displacement. He did not mean absolutely to assert that uterine displacements were of no consequence, or that they caused no accidents. He had seen enough of these diseases to know that it was not so. He agreed with M. Hervez de Chégoin that many displacements resulted from diseases of the uterus, but he did not consider, with him, that cases of uncomplicated displacement, producing distressing symptoms, were at all common; he believed them to be very rare, but he did not deny their existence. It was far more usual to find displacements—flexions and versions—existing to a considerable extent, without in the least affecting the health, or leading the women in whom they occurred to suspect their existence. As regarded the introduction of the intra-uterine pessaries, he might mention that M. Michon had not only abandoned their use, but had expressed scruples about introducing foreign bodies even into the cervix, inasmuch as he had seen peri-uterine inflammation and the formation of abscesses follow the introduction of a hollow sound. He agreed with the principles of treatment laid down by M. de Chégoin, and considered that mechanical treatment should never be resorted to until all other pathological conditions, existing simultaneously, had been removed; that we

should not confine our attention *solely* to the local affection, but by all suitable means endeavor to remedy the general health, and those derangements of innervation, nutrition and circulation, which are so common in such cases. He believed further that, in certain cases, it might be advantageous to associate with the local treatment of some uterine affections, the use of mechanical means, which by fixing (*immobilisant*) the organ without irritating it, might aid in removing chronic inflammations, of a partial or general character. He protested against the injustice of M. Cazeaux's accusation of having quoted only the unfortunate, and suppressed all the useful cases; he had drawn his data from all the cases he was cognizant of; and he knew of no really successful ones. He appealed to the statistics of M. Gosselin which he had quoted, for the truth of his assertion, that many uterine affections—even the most serious—might exist without giving rise to any uneasy symptoms. Displacement was a simple unimportant deformity. M. Cazeaux had alluded to catarrhs, granulations, ulcerations, neuralgias, etc. coexisting with displacements. In such cases these lesions should be attacked before the displacements; and in sixty cases he had treated on this principle there were only three in which any bad symptoms remained after two or three months. He advanced a series of arguments and statistics, at great length, to prove the fallacy of the assertion—made originally by MM. Boulard and Verneuil, and quoted in the speech of M. Cazeaux—that anteversion was the normal condition of the uterus in children and women who had never borne children. He had shown by his researches that intestinal expansion in the dead body, might raise up the organ, and so deceive observers. But he admitted that there was a *predisposition to anteversion* at all periods of life. He regretted that M. Cazeaux had not stated, for the enlightenment of MM. Huguier, Valleix, Nonant, and others, the “proper precautions” which rendered uterine catheterism safe. He did not deny the usefulness of the uterine sound (*hysterometre*;) he considered that it was wrong to make the use of it general, and thought its employment should be confined to the *few* cases in which it was indispensable.

With considerable asperity, Depaul next attacked the assertion which had been made by Cazeaux, that there was no such thing as inflammation of the tissue proper of the uterus; and he quoted cases and authorities to disprove it. He alluded to the statement made by M. Dubois, that the uterus was never permanently replaced by the use of instruments, and asked if, in the event of this statement being true, it did not militate against the use of intra-uterine pessaries. After

the cases cited by M. Dubois and himself, he thought there could be no doubt of the fact that these instruments were useless. ("*Les redresseurs ne redressent pas.*") He believed that a modified form of the pessary might perhaps, as Dubois said, relieve uterine neuralgia; but he did not hesitate to express his opinion, that the evil results and fatal cases caused by the intra-uterine pessary ought to exclude it from use in the treatment of all serious uterine phlegmasiæ. He next alluded to M. Malgaigne's speech, and considered as very inconclusive and unsatisfactory the test he gave for the diagnosis of displacements, viz: cessation of pain on assuming the horizontal posture. He also objected to Malgaigne's detestation of the speculum, and of vaginal examination in such cases. He had accepted an invitation from M. Malgaigne, on the 2d July, to go to the hôpital St. Louis, to see two cases there which had been cured by M.'s hypogastric belt. They were said by Malgaigne to be cases of simple displacement—the one a case of anteversion, the other of retroversion. On examining the patients manually and by means of the speculum, he found considerable ulceration of the cervix to be present in both cases; in the first there existed, in addition, slight anteversion and considerable prolapsus, in the other there was no displacement whatever. He agreed with all that had been said by his learned master, M. Velpeau, in praise of the high scientific character and general probity of M. Valleix; but he dissented from the opinions expressed by Velpeau as to his practice. If Valleix had had cases proving the successful use of intra-uterine instruments, he was astonished that he had not published them. Valpeau had attributed most of the evil results of pessaries to errors of practice and diagnosis, and to want of expertness and ease in manipulation. He could not see wherein lay the difficulty of introducing a bougie into the uterine cavity, and could not imagine practitioners like MM. Valleix, Nélaton, Huguier, Aron, etc. being deficient in proper precautions or expertness. What always astonished him was that the uterus should be so tolerant of instrumental interference, when it was recollected how easily it was irritated by the presence of a small foreign body, and how the presence of a simple clot or polypus within its cavity induced violent contractions of it, which only ceased when the offending substance was expelled. There was a great difference between these foreign bodies and an intra-uterine pessary formed of solid inflexible material. It was said that the end of the stalk should not touch the fundus uteri; but it was forgotten that this organ had, properly speaking, *no* cavity; and however short might be the instrument introduced, it

acted on the organ by all the parts of its surface, and especially by its point, against which the uterus was continually being impinged, either by its own inherent force of contractility, or by impulsions given to the organ by muscular movements and the pressure of the intestines. M. Velpeaux had concluded his speech by expressing a hope that M. Valleix would decide the question as to whether these instruments should or should not be used. M. Valleix had already done so; but his opinions were dangerous, and therefore he (M. Depaul) could not accept them. He concluded by laying before the academy the following conclusions made in the name of the commission, and carried by a majority, with the exception of the third, in which M. Depaul said he was at variance with his colleagues:

1. The cases reported to the academy by MM. Broca and Cruveilhier, along with numerous others on record, prove that the use of the intra-uterine pessary may often occasion serious accidents, and sometimes even death.

2. In the rare cases in which this instrument has appeared productive of advantageous results, it is not proved that it had always acted by replacing the uterus.

3. In some exceptional cases where uterine displacements (*déviation*s) have occasioned serious functional derangements, and where all known therapeutic measures have been tried in vain, the application of the intra-uterine pessary may be tried as a last resource.

4. The commission has the honor to propose a vote of thanks to M. Broca, for his very interesting communication which has originated the late debates; and also to M. Cruveilhier.

The president put the first conclusion to the vote.

M. Velpeau. This conclusion appears to me to have been adopted; but it is too severe. Instead of saying "the use of the intra-uterine pessary may *often*," I would substitute the words, "may *sometimes* occasion," etc.

The president. It is proposed to suppress the adverbs altogether. It should be read: "The use of the pessary *may* occasion," etc.

The president then put the first conclusion to the vote, with the word "*often*" suppressed. It was adopted in this modified form.

The *second* conclusion was carried unanimously, without any modification.

The *third* conclusion was then read, and M. Gibert demanded its suppression.

M. Velpeau. I insist on its being allowed to remain.

M. Cazeaux. I am convinced that the use of the intra-uterine pessary is always useless and sometimes dangerous. I cannot adopt this conclusion.

The president. It contains the words: "As a last resource." For this purpose we may try anything. [Laughter.]

Several members proposed the suppression of the conclusion, and the president proposed to put it to the vote.

M. Jobert requested the suppression of the words "as a last resource" (*comme dernière ressource.*)

M. Velpeau supported this amendment.

The conclusion thus modified was put to the vote and rejected.—*Monthly Journal Medical Sciences.*

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### PHYSIOLOGICAL.

THE PHYSIOLOGY OF MENSTRUATION AND CONCEPTION.  
*By Prof. Bischoff.*—The attention and laborious investigation of the student has been long directed towards that most interesting and important point, the physiology of menstruation and conception, and amongst the many who have labored in this field, we know of none more distinguished than Prof. Bischoff. We design to give our readers an abridged sketch of his recent labors, and the results to which he has arrived.

M. Bischoff gives in detail his examination of the organs of generation in thirteen women, who had died suddenly whilst menstruating; the death, in most of the instances, being the result of accident or violence. These examinations were made with the greatest accuracy; and, when taken in connection with the previous history of each case, will aid very much in determining the physiological facts involved. Our space forbids us from presenting the minute details of each dissection, and we will therefore only give the deductions derived from them.

Professor Bischoff remarks that these cases confirm the doctrine, that in women at every menstruation a follicle ripens, swells, and bursts, that the ovum escapes, and that a corpus luteum is formed. The eleventh case seems to prove that the full consequences of menstruation are not in every instance necessarily carried out, but that a follicle may swell, and the ovum ripen without the bursting of the follicle, or the escape of the ovum. Such a condition will cause sterility, notwithstanding menstruation. Perhaps, also, the pain of the menstrual period depends upon this incomplete development.

A woman may not menstruate, and yet she may conceive ; for the essential condition, the ripening and escape of an ovum, may proceed, and only the usual outward symptoms of this event, the secretion of blood, fail. Prof. Bischoff remarks, that he could never succeed in finding the ovum, but observes that he does not believe that it is so soon destroyed. He says there are but two cases known to him where it was so found, and that only one of these presents the desired certainty. This is the following observation of Prof. Hyrtl, of Vienna : Thérèse Michal, aged 17, died on the 10th of October, 1844, of peritonitis, in the clinique of Prof. Oppolzer. She had only menstruated twice in her life, and the last time was two days before her admission into the hospital on the 8th October. The breasts were tolerably developed ; the pubes slightly covered with hair. The hymen was uninjured ; the uterus of moderate size, compact, its cavity filled with a considerable quantity of thick blood ; the mucous membrane was so loosened as to resemble a half-liquid plastic exudation. The lining membrane of both Fallopian tubes was suffused, loose, and covered with mucus. Both ovaries were of a fair size, but the left one showed a ruptured follicle of the size of a large hazel-nut, filled with semi-fluid blood. Prof. Hyrtl submitted the parts to careful inspection under the microscope on the same day. Neither in the vagina, uterus, or tubes, could he find a trace of spermatozoa. But by a careful examination of the left tube, in that part which traverses the substance of the uterus, he found an ovulum, with all its characteristic properties, somewhat dull and turbid indeed, but fully recognizable. Hyrtl believes he even detected the germinal vesicle. This is a remarkable anomaly, since the germinal vesicle of every ovum, when it has left the ovary, has disappeared. Prof. Hyrtl had the ovulum immediately drawn by his artist, and exhibited it on the same day in his lecture on physiology. This case is free from doubt, as there is no room to suspect coitus. Prof. Bischoff regrets that he cannot admit as much with reference to the cases of Dr. Letheby, published in the "Philosophical Transactions" for 1852, but his reasons of dissent do not appear to be very valid.

Prof. Bischoff takes occasion to discuss the question as to the differences between the corpus luteum of simple menstruation and that of conception. In the cow and sow the corpora lutea of the nonpregnant are altogether similar to those of the pregnant, and he has made the same observation in the bitch, the cat, and the porpoise. They disappear more quickly when no conception follows. In the human female, at the earliest period of the bursting of the follicle, the filling

of it with blood, and the beginning of the development of the membrane of the follicle, to the formation of the corpus luteum, there is no difference at all. But in the further development of the corpus luteum, the impregnation of the ovum and gestation bring about a material difference. The corpus luteum in simple menstruation never attains the full stage of formation up to the complete filling up of the follicle and the metamorphosis of the blood coagulum; but this substance only develops itself into a peripheral layer, and soon falls into retrogressive metamorphosis. It shrivels up, and only leaves at the next and the succeeding menstruation a more and more indistinct spot, changing from yellow to brown and black, and soon there remains nothing but a scar; which lasts for a time, and gives evidence of the past process which has at an earlier period taken place on the surface of the ovary. The corpus luteum of conception, on the other hand, goes on developing itself throughout the first months of pregnancy, and attains a fullness of size, color and texture, which the menstrual corpora lutea never reach. It lasts throughout the whole period of pregnancy, and disappears after delivery. It may, however, be questioned whether it has a great diagnostic value. In the first period, so long as there are no other signs of pregnancy, these differences either do not exist, or are very difficult to determine. After delivery, when the signs of pregnancy in the uterus have disappeared, it again becomes difficult to distinguish them from the corpora lutea of fourteen days' or three weeks' standing, resulting from menstruation. And where pregnancy is plain, from the state of the uterus and other parts, the corpus luteum is of no value. Prof. Bischoff, therefore, concludes that the corpus luteum cannot be used in the determination of *doubtful cases*.

Professor Bischoff holds it to be proved that conception and pregnancy depend absolutely upon menstruation as the period of the ripening and expulsion of an ovum. He remarks, however, that it can scarcely be doubted that the time occupied by the transit of the ovum from the ovary, the arrest of the ovum, and the preparatory changes in the uterine mucous membrane, suffer great differences in individuals, and hence entail a longer or shorter duration of gestation.

*Henle's Zeitschrift, and Month. Jour. Med. Science.*

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THE ENTRANCE OF THE SPERMATOZOON INTO THE OVUM.  
*By M. Keber.*—By the diligence of embryologists, the science of development continues to make wonderful advances. Martin Barry and Nelson had already published observations of

the entrance of the spermatozoon into the ovulum; but their observations were not regarded as completely satisfactory, till Keber, following in their footsteps, by a careful observation of the process as it takes place in the fresh water muscle, made out and described the different stages of this wonderful function. Since Keber's work appeared, M. Bischoff has been twice in the press; first of all, with a pamphlet controverting the views of Keber, and then with one fully confirming the same views. Bischoff also takes occasion to make some amends to Martin Barry, whose uncommon accuracy and profound research he has occasionally failed to recognize, till forced by overpowering evidence.

In the fresh water muscle, (*unio*,) at the time of conception, the ovulum, although still small, projects at one part a minute process which springs from the membrane of the albumen, and perforates the cortical membrane. This process dehisces, lets escape a little albumen, and admits one of the spermatozoa which surround it. This done, the micropyle, as it is called, again closes by constriction or obliteration.

Afterwards (and sometimes earlier) there is formed near the micropyle an adhesion between the membranes of the albumen and of the yelk, then the yelk-bag dehisces, receives the spermatozoon into its interior and again is closed.

The spermatozoon afterwards sinks deep into the yelk, sweels and becomes rounded; after some time a nucleus appears in it, while its outer membrane thins, and at length disappears.

The nucleus of the spermatozoon spits up into several irregular divisions which at first lie near one another, and then become diffused through the yelk, so that before the dissolution of the germinal vesicle the yelk is filled with particles derived from the male.

M. Keber has also confirmed the observations of Barry in regard to the small pellucid vesicles not rarely found in the abdominal cavity of the rabbit, attached to the ovary, the fimbriæ, the oviduct, the peritonæum, or the uterus itself; within which are observed vibratory motions over the whole surface and rotary movements of various corpuscles, and of a large mulberry-like body on its axis, which increases under the eye of the observer by the apposition to it of roundish corpuscles, from the fluid of the vesicle.

Barry observed a similar vesicle imbedded in the mucous membrane of the uterus. Those found in this situation, are smaller than those of the abdominal cavity. In these bodies Keber has observed changes resembling the formation of the

micropyle in the ovulum, and for that and other reasons regards these visicles as ova. But for farther discussion of this subject we refer the reader to Keber's monograph.

*Edinburg Med. and Surg. Jour.*

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ORIGIN OF SUGAR IN THE LIVER. *Translated by the Editor.* M. L. Figuier, of the school of pharmacy of Paris, has read a memoir in opposition to the explanation given by M. Claude Bernard, of the formation of sugar in the liver. The latter gentleman demonstrated for the first time in 1848, that the liver of men and other animals contained a certain quantity of sugar. Pursuing this idea—previously unknown—he was led to consider the liver as the organ in animals for the production of sugar. Having opposed theoretically the opinion of Bernard, Figuier presents some experiments which he had made on this subject. The soluble contents of the liver of the ox, which had been the special object of his researches, are, besides the blood :

1st. An albuminous substance, which resembles a compound, studied and described by M. Mialhe, under the name of albuminose, the product, according to this chemist, of the ordinary transformation which nitrogenized aliments undergo during digestion.

2d. Of glucose.

3d. An organic acid and a small number of mineral salts, of which chloride of sodium is chief.

The experiments of Figuier appear to prove that the secretion of sugar is not located in the liver. That which gives strength to the idea, is the admitted fact, of the nonexistence of glucose in the mass of blood in its healthy condition. The remarkable fact has been observed, that animals subjected during whole months to a diet composed exclusively of meat, retained in their livers appreciable quantities of sugar. We have demonstrated, says M. Figuier, that the blood of man and of domestic animals contains sugar, and that the liver, taken pound for pound, contains only two or three times as much as the blood; this difference is not surprising. The liver is essentially an organ of depuration for the blood. The different products of digestion taken by the vena porta from the whole surface of the intestinal tube, undergoes in this large gland a peculiar change, by which matters useless to nutrition are thrown off, and the essentials of digestion retained. It is not, therefore, astonishing that sugar is found more abundant in the liver than in the blood. All the glucose produced by digestion is concentrated there, to be afterwards

distributed by the hepatic veins to the general circulation. Arrived in the mass of the blood, it is gradually destroyed by process of respiration, and its amount consequently diminishes continually. From the facts that we have observed, it follows that the experiments of Bernard, demonstrating the persistent existence of glucose in the blood of dogs, subjected exclusively to animal food, cannot be invoked in favor of the gluco-genic function. I have shown that there exists nearly a half centime of glucose in the blood of butchered animals, of the ox, and of the sheep, collected at the moment these animals were killed for the market. Now, the flesh of butchered animals contains vessels, these vessels contain blood; thus the meat of the ox and sheep which was fed to the dogs, in the experiments of Bernard, contains sugar, and he administered, doubtless, the compound even, which we will mention shortly. The quantity of glucose thus introduced was no doubt small, but it was constant, and the liver being an organ of condensation, and of accumulation, for the glucose, the proof of its existence was very naturally found in this organ at the autopsy. Our experiments allow us finally to explain very simply the peculiarities which have brought to light the study of what is called the gluco-genic function.

M. Bernard observed that the appearance of sugar in the liver coincided with digestion; and he has dwelt considerably on the point. If it be admitted that sugar is not introduced into the liver, except through the products of alimentation, that is to say, through feculent, or saccharoid aliments, the coincidence of the appearance of sugar with the digestive period will be explained.

We conclude, finally, that the liver in man and animals does not make sugar; that all the glucose that it contains comes from the blood that fills its tissues, and that this glucose has been carried in the vessels by the digestion of amylaceous or saccharine aliments.

The function of the liver, as a secretory organ, is confined, in our opinion, to the elaboration of the bile, and it is very singular that this proposition, that existed in the early history of science, should assume, in our day, the appearance of a novelty.—*Revue de Therapeutique.*

## PROGRESS OF MEDICAL SCIENCE.

## SURGICAL.

*Fracture of the hyoid bone.*—Through the kindness of our friend, Dr. P. G. Fore, of this city, we were invited to examine a case of fracture of the *os hyoides*, that had occurred about one week before we saw it, in one of his patients. The patient was a female, about 30 years of age, who had fallen down the cellar steps, striking the prominent part of the larynx and hyoid against a projecting brick, severely injuring the larynx as well as fracturing the bone. The fracture was on the left side, and near the junction of the great *cornu* with the body of the bone. Crepitation was distinctly felt, on pressing the bone between the thumb and finger; or, when the patient would swallow; though, at this time, the severe symptoms that followed the accident, and continued several days, had somewhat subsided.

Immediately after the accident, there was profuse bleeding from the fauces, and she experienced great difficulty and pain in the act of swallowing, and the power of speech was almost entirely lost. On attempting to depress or protrude the tongue, she felt distressing symptoms of suffocation. Considerable inflammation and swelling of the throat and pharynx ensued, and continued in some degree up to the time of our visit.

To-day (about four weeks since the accident) Dr. F. informs us, that the patient has so far recovered as to be able to converse, though the voice is somewhat impaired. She is yet unable to swallow solid food, and is wholly sustained by fluids.

*Treatment of hospital phagedæna.*—The prevalence of phagedæna, which, during the past nine months, has been pretty general in the London hospitals, seems now to be steadily diminishing. It has been very difficult to arrive at any satisfactory conclusions respecting the laws regulating its occurrence. At one period, it has appeared to spread through a certain ward, or to prevail in a certain hospital, as if by contagion; while at others, observations have been made tending strongly to support the opinion, that it was largely under the influence of atmospheric changes. It has prevailed very irregularly in the different hospitals, being now epidemic in one, and then, after the lapse of a short time, appearing in

another. On the whole, it has been a mild form of the disease. Very few have, we believe, died of it, and a vast majority have recovered after a short and not very destructive attack. In several instances, however, in which stumps, after amputation, have been attacked by it, so much of the soft parts have been destroyed, that a second removal of the bones has become necessary. With regard to the treatment of the disease, the following recommendations might, we think, be summed up as the results of the combined experience of the surgeons who have been most engaged with it:

1. As soon as a wound shows a tendency to become sloughy or phagedænic, to have the patient change his bed, and if possible, his ward. This practice was pursued in almost all cases in Guy's and in the London hospital, and more or less in most others. Often very sudden benefit was remarked. The recommendation, of course, proceeds on the supposed desirability of removing the patient away from any local influences, contagious or endemic, which may have had part in producing the disease. The following case may be quoted as illustrative: A boy in excellent health submitted to primary amputation of the arm, on account of a crush, under the care of Mr. Wordsworth, in the London hospital. On the day following the operation he was remarkably well, and had not the least constitutional disturbance. During the next six days he continued well, and the stump was granulating healthily, when it became necessary to change his bed, and to put him into one from which a man who had died of pyæmia had been removed. Mr. Wordsworth directed that all the bed furniture should, as a measure of precaution, be removed; and, with the exception of the mattress, this order was complied with. On the morning following the change of bed, the lad was feverish and restless, and his stump had lost its granulations and presented a sloughy surface. He was at once ordered back to his original bed. The phagedæna did not spread; but almost immediately after the second change, the condition of the stump began to improve, and ever afterwards the advance was uninterrupted.

2. To destroy fetor by the employment of charcoal. In this way, probably, not only is a gas decomposed which was likely to have acted prejudicially on the animal functions, but one which might not improbably have been the means of direct infection.

3. To employ nitric acid as an application to the sore. Most surgeons have formed a very high opinion of the value of this remedy when efficiently used. The acid should be concentrated and pure, and should be liberally applied. We

have already at such length spoken in its praise, that anything further need scarcely be here added. (See *Medical Times and Gazette* for January 6, page 9.)

4. To employ as constitutional measures tonics and general stimulants, with, in some cases opium, or the chlorate of potash as specific remedies. Respecting the use of the latter, a considerable difference of opinion prevails; but instances have occurred in some hospitals which appeared to show almost incontestably their potency in at least some individual cases. The chlorate of potash well deserves a much more thorough investigation as to its remedial powers than it has yet received.—*Medical Times and Gazette*.

In the *Charleston Medical Journal and Review* we find a case of traumatic perforation of the stomach. The wound, inflicted with a Bowie knife, was three-fourths of an inch long and four inches deep. The man had, just before he received the wound, eaten and drunk heartily, and the contents of the stomach were evacuated through the wound. In about ten days the patient was well; and in little more than a month, at his usual work. The case was treated by Dr. C. Hapoldt.

We notice this case, because it is unusual for patients to recover from severe wounds of the stomach. At least, we could have said so some few years ago, but of late it has become a very accommodatory organ to surgeons, or surgery has very much improved, for we now hear of the stomach being cut open, and foreign bodies, such as bars of lead, &c. being removed with impunity.

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MATERIA MEDICA AND THERAPEUTICS.

*Tincture of iodine with chloroform.*—By M. Titon.—This new preparation is a solution of iodine in chloroform; it dissolves the iodine even to complete saturation in the proportion of twenty to one hundred. This solution, containing the fifth part of its weight of pure iodine, is of sufficient density to preserve it under water, and is of a deep violet color with a fine purple reflection. Its richness in iodine, its form (that of a diffusible stimulant) are all conditions the most favorable to the perfect action of the iodine; on the other hand the dissolution being perfect, the molecules of the metalloid are, so to speak, imprisoned in the vehicle. And this is demonstrated by dropping a few drops in a test tube filled with urine, water or saliva, when the drops fall to the bottom in a spher-

roidal form; and whether the liquid previously contained the appropriate reagent, or whether it is subsequently added, there is no traces of iodide of starch. If, on the other hand, we cover the mouth of a bottle holding the chloroform tincture of iodine with a starched paper, upon which, either before or after, a drop of nitric acid has been placed, a blue tint is immediately apparent upon that part of the paper impregnated with the reagents, and this result is more or less hastened if the bottle is warmed, or otherwise by the heat of the hand. We have here, consequently, a proof that the vapors of chloroform, otherwise recognizable by their agreeable odor, are charged with iodine vapor. This perfect solubility and volatility which pertain to the two bodies individually—less, however, than those of the pure chloroform—warrant a rapid and complete absorption; and the direct proof of this absorption is found in the elimination of the iodine by the secretions. Ten minutes after an inhalation of five minutes, the iodine was detected in the saliva, and in fifteen minutes in the urine.

The chloroform solution of iodine may be used by every means of inhalation. M. Titon generally employs a phial which is held to one of the nostrils for two, four or ten minutes; and the evaporation is hastened by shaking the phial or holding it in the hand. The first inspirations produce a feeling of calmness and ease, without occasioning the suffocative symptoms at times attending the inhalation of pure chloroform. The respiratory action is carried on with more freedom. In from four to six minutes, the patient feels in the nose and throat an extremely pungent sensation, which rapidly disappears the moment the inhalations are discontinued. The pungency can be obviated in inspiring the vapor in a less concentrated form, in breathing from time to time a little fresh air. There may be felt after several inhalations a slight degree of pressure about the temporal regions which disappears rapidly. Following the sedative action manifest when the inhalation is commenced, there is an increase of energy, the vital forces are also increased and the quickness of perception and sensation announces that the absorbed iodine has carried its action to the nervous centres, from which it reflects a salutary influence upon the whole system. Iodine, administered in this manner, possesses evidently two advantages; in the first place the quantity may be graduated *ad libitum*: the contact of the portions, intermitting like the inspirations, the susceptibility of the organs, in allowing the duration of the treatment to be prolonged; and then the absorbing surface is of more extent certainly than by the gastro-intestinal mucous membrane.

*Bulletin de Therapeutique.*

*New method of introducing medicines into the system, more especially applicable to painful local nervous affections.*—Dr. Alexander Wood has been led to introduce solutions of morphia and Batley's sedative solution into the cellular tissue, as near as possible to the affected nerve, by means of the small perforating syringe, constructed by Mr. Ferguson of Giltspur street, for injecting aneurisms with perchloride of iron. Dr. Wood narrated nine cases in which he had employed this method of treatment, in all with perfect safety, in some with complete, in others with partial success. As to the *modus operandi* of this method of treatment, he endeavored to show, from the experiments of Muller and others, that the effect of the local application of opium to a nerve was to destroy its sensibility at the part, and that from this action of the drug the immediate cessation of the pain arose. He then pointed out the rapidity with which absorption appeared to take place from the cellular tissue, which seemed to account for the rapidity of the narcotic effect which a small dose of opium so introduced was found to produce. He also pointed out, that other medicines might be introduced in the same way.

Dr. W. T. Gairdner mentioned, that a patient in his wards in the hospital, had been injected the other day in the way recommended by Dr. Wood. The result was not decisive, as the complaint for which the man was under treatment, viz: lumbago, had been undergoing rapid amendment, and, indeed, the day after the operation, was nearly gone. The experiment, however, was attended with little suffering, and it was noted that some degree of giddiness was almost immediately produced.—*Monthly Jour. Med. Science.*

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#### OBSTETRICAL.

We have received a letter from Dr. Walter Burnham, of Lowell, in which he claims to have successfully performed the operation of extirpation of the uterus, together with both the ovaries, through the abdominal parietes, in that city, June 25th, 1853, three months previous to Dr. Kimball's operation reported in our last number. The case was originally reported in "Nelson's American Lancet," published in Plattsburg, N. Y. and Montreal, Canada, January 1854, and was copied into the "Worcester Medical Journal" of February of the same year. The patient recovered in two months. It thus appears that Dr. Kimball is mistaken in supposing that he had first successfully performed this operation by the hypogastric method.

*Of the delivery a posteriori, as a reserved remedy to obviate in difficult cases the perforation and the Cæsarean section of midwifery.* By I. F. Ossiander, professor at Gottingen. Translated from the German.—The advantages to be derived in the delivery, if the person to be delivered is resting upon her elbows and knees, the fundament verted towards the assisting surgeon, seem not to be generally known. I am convinced by repeated experiments, that in that situation we are in the possession of a great remedy, by which, in most difficult cases, the perforation and Cæsarean operation can be obviated, as we are thereby enabled to execute the turning operation, which is scarcely possible in the usual situation on the back. Let those practitioners, who perhaps do not know this remedy, or who had no opportunity to try it, having perhaps a prejudice against it, believe me, and they will be thankful for having acquired a more thorough knowledge of a practical secret, by which I was enabled to deliver women comparatively easy and even of living children, in many cases where the delivery was by other physicians considered impossible, except by means of perforation or the Cæsarean operation. Some would now, in such cases, resort to the kephalotribe, (properly called forceps, cephalotribe, one of the coarsest and most impracticable tools ever invented to accomplish difficult deliveries,) or would propose artificial miscarriage for future cases, if the situation on the knees, the elbows and the face, and the turning operation *a parte aversions*, had not solved the problem in a manner equally as natural or simple and easy.

In cases where the forceps were applied without effect, or where they threatened to slide or actually did slide off, without effecting a motion of the head, where the pelvis is narrowed to a considerable degree, spoiled by rachitis or osteomalacy, its diameter contracted, the promontorium strongly protruding, so that the head could not be moved forward, where the arcus pubis scarcely admitted two fingers, where the hand was prevented from entering the uterus in consequence of its contractedness, caused by the premature discharge of the amnean fluid, by the wrong situation of the child, or by the wrong treatment on the part of the midwife or surgeon; in all these and a number of other cases, let the remedy hereby proposed be applied, and its advantages will be astonishing.

1. The hand penetrates easier the exterior parts.
2. It reaches easier and sooner the legs of the child.
3. By the reclining of the pregnant body, the entrance to the basin is cleared from the head and shoulders of the child,

thereby enabling the hand of the operator to penetrate with greater facility.

4. The hand and arm of the operator sustains less fatigue by directing its action downward and forward, than by the nearly vertical or perverted operation in the usual situation of the pregnant. Who has not felt the painful fatigue and impotency of the arm, obliging the operator to repeatedly retire and rest his hand in order to renew its strength? There are cases, where it is nearly impossible, with a hand thus weakened and fatigued, to bend and stretch the leg of a stout child of eight pounds, in the usual, perverted situation of the woman. A change of situation, *sistus aversus*, and the operation *a tergo*, frequently removes the difficulty at once.

5. In cases of a persevering stricture in the forepart of the uterus, the only part where it occurs, this remedy may become the conditive sine qua non of the turning.

6. It also appeared to me, that the turnings of the child around the axis of either its length or its breadth was easier than in the usual situation of the woman on her back. When I reached for the legs of the child, it seemed to me that the body of the child was moved and turned a great deal easier than usual.

In order to obviate the suspicion of exaggeration, I am silent as to the advantages secured by the delivery, a posteriori, with regard to the extraction proper. But a cautious experiment will demonstrate it at once.

But whatever may be the reasons, it is a fact, that in several difficult cases, where other men of experience as well as myself despaired of the possibility of a delivery in the natural way, where perforation and the Cæsarean operation appeared to be unavoidable, the application of this remedy rendered the turning operation practicable, and a living child was extracted without any injury.

The situation here referred to is certainly not beautiful, and the teachers of good taste would be amazed at the sight of a Venus lying on her face, the fundament turned up and the genitals protruding. But our art has generally no relation to æsthetics, and the principle, that all natural and wholesome remedies are good and proper in the administration of medicine, may justify us in putting a woman into such a situation. It appeared to me in several cases, that the woman, far from resisting, felt the advantages of the situation on the knees, which I recommended and prepared for them. The entire organ of delivery, is a posteriori, a hysteron, especially with the animals, both those running on four legs and those running on two legs, as the birds; and the fashionable bearing of the

elegants of our day seems to indicate their inclination to hysterig, to the breeding modo ferarum, and to the delivery in the position on the knees.

The delivering stool was, therefore, frequently rather an impediment than an assistance to the delivery, because it forced the woman in her labor to rely entirely upon her situation on the back; because it prevented her from turning to side, which is at least an approximation to the averse, and because it rendered nearly impossible the situation on the knees.

This can only be properly done on the bed near the side edge of it. The bed must be prepared for this purpose, either by putting some sofa cushions near the opposite edge, or, where these cannot be had, a bag filled with hay or oakum may be spread across. All the other feather cushions, to be spread behind the horse hair cushions or the bag, so that when the woman to be delivered puts her knees on the same, her face and elbows may have smooth support. The face must be considerably deeper than the fundament. This situation is particularly beneficial if the woman has been tortured and fatigued for hours, or even for days in her situation on the back. These pains in the back are thereby at once removed. I have seen even the weakest sustain themselves in this situation, otherwise they must have been supported by assistants.

That in this as well or more so than in other obstetric remedies, all nudation should be obviated, (*"ne prae pudore uteri orificium contrahatur,"*) is already stated in the ancient Roman book on midwifery, and it is scarcely necessary to mention that this rule is dictated by wisdom as well as by humanity. Also, that, from the more elevated position of the uterus, the turning operation is to be made by the assistant, while standing, not when sitting down.

With regard to other remedies, I was, in several cases of *retroversio uteri*, enabled easier to introduce the catheter while in the situation on the knees. The reduction or reposition, or the prolapsed, inverted or retroverted uterus will no doubt be most easily effected in this situation; but I can only assert a mere supposition, that in cases of great difficulty in the delivery on the knees, the forceps may be used to advantage, whereas their very construction as well as other reasons are unfavorable to their application in this situation of the body.

☞ Subscribers to the Stethoscope, or those who wish to subscribe, can be supplied *with all the back volumes*, bound or in numbers, at the present subscription price, (three dollars per annum.)

The future publication of this *southern medical journal* is now fixed upon a permanent basis. It will be issued on the first of each month, enlarged and improved in original matter, reports of cases in different hospitals, together with lithographic drawings and explanations.

Persons who have subscribed *since the commencement of the work*, can be supplied with complete copies, by addressing the publishers.

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### OUR ADVERTISING SHEETS.

We add to each of our numbers a few pages of advertising space. This is designed for such matter as specially pertains to medical men.

We would, however, have it distinctly understood, that we do not obligate ourselves to insert every advertisement which may be sent us, **BECAUSE IT IS PAID FOR.**

We shall retain the liberty of rejecting advertisements which savor in any degree of the pretensions of the quack or the self laudations of the mountebank.

Our present number contains the announcement of a medical school, (viz: University of New York,) with its curriculum of study, which appears to us to be liable to just and severe criticism: "The session of 1854-55 was attended by a class of three hundred and seven students, on one hundred and six of whom the degree of doctor of medicine was conferred."

To our old fashioned notions of propriety, this is a **STRANGE** preface for the announcement of a term of instruction in a scientific institution.

We came to the conclusion that the University of New York is the place in which a diploma may be very easily obtained; and this was no doubt the impression designed to be created.

We trust that the deans of medical faculties, who send us advertisements, will in future be careful to omit all such appeals.

We are determined that whatever of influence our journal may possess, shall be thrown (advertising sheets and all) in favor of such institutions as are zealously laboring for more comprehensive courses of instruction, and consequently for an increase of the requirements for the doctorate.

June 1, 1855

THE  
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ORIGINAL ARTICLES.

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**Dropsical Accumulations.**

BY F. W. RODDEY, M. D. OF RICHMOND CITY, VA.

In the last number of the Stethoscope, I find an article on "dropsical accumulations," that attracted my attention and excited my interest. My observation has been of late very much addressed to that subject; and the fact of being frequently called upon to encounter its difficulties, under circumstances not common in general practice, has led me very frequently to question the completeness (at least) of its pathology as well as the ordinary plan of treatment usually relied upon in such cases.

In the article alluded to, I find two very important queries propounded: 1. "Through what channels and by what expedients can the accumulations be gotten rid of with most safety to the patient?" 2. "How can their re-formation be prevented?"

The channels indicated and the plan proposed to secure the first grand object, are in such entire accordance with my own experience, as being the best adapted to the combination of safety, certainty, and the permanency of result, that I propose the detail of three very nearly parallel cases, (from amongst many others,) as corroborative of the views expressed by the

author of the contribution alluded to. I think they will go very far to illustrate a very important principle of practice, and to recall attention to channels of elimination too often overshadowed by the two great viaducts that command the attention of the majority of practitioners, to the exclusion of this too much neglected excretory organ of the body, viz: the skin.

To the second query propounded, I do not know that I could add anything in the way of remarks, that would be more instructive, or even suggestive, than the simple detail of the cases themselves, tending as they do to remove the too general opinion that the dropsy of serous sacs is almost always symptomatic of an irremedial organic lesion of some of the more important viscera.

We have pretty correct ideas of both general and local dropsies, as results of organic disease of the heart, liver, kidney, lung, spleen, &c. as well as local dropsy, from any mechanical obstruction. So also, we understand how a local dropsy may follow an active or passive congestion, or a sub-acute or even acute inflammation of a serous membrane.

And then, on the other hand, we have a rationalé for that really passive and (I might say) mechanical result, the effect of what we call a dyscrasia of the blood, so uniformly giving rise to general anasarca.

But over, above and beyond all this, there really does appear to be something not yet understood, or rather explained—effects that cannot be legitimately traced to any of the known causes, and for the elucidation of which there must needs be closer observation and more searching investigation. For instance, take one of the three cases (and the most uncomplicated one) of serous dropsy—hydrothorax, and examine him as he presents himself for the first time for medical advice.

In the case of Scott, we have a remarkably robust, healthy looking man, and as far as we are able to judge from appearances, peculiarly exempt from disease. You find him a most perfect model of muscular development, and claiming for

himself, up to within a very short time, a strength and vigor of body that you would have inferred from his appearance. You find all the functions of the secretory and excretory organs (as far as we can interrogate them) healthily performed, and nothing anæmic about the man. Now, what says he of himself? The very first inconvenience felt was an oppression about the chest—a difficulty of breathing upon making any unusual exertion, attended with cough and something of pain. But as the disease advanced, the cough, oppressed breathing and pain increased, and he finds himself less and less disposed to physical exertion. But we find him now complaining of pain in his *lower extremities*, increased by, and very much impeding, motion. An inspection of his gums presented the appearance of scurvy, and an examination of his body, the lower extremities particularly, revealed the petechial spots (not well shown in the negro) so characteristic of the disease. And I will here take occasion to remark upon the pain and impeded motion in the lower extremities, that is almost invariably observed in cases of scurvy. This feature (which is a very striking one) I have not had occasion so particularly to observe until within the last twelve or eighteen months. Here, then, we have scurvy complicating, if not causing, a dropsy of the chest, and not only complicating or causing this case, as well as the other two cases about to be detailed, but every other case of *pleuritic* effusion that has come under my treatment in the state prison within the last fourteen months. Pleuritic effusion, as we ordinarily meet with it, is a disease in which a prognosis is always unfavorable, and recovery in such cases is an exception to the rule. Meeting, then, with such uniform and *unexpected* success from the very simple treatment adopted in the unusual number of cases admitted to hospital treatment in the state prison, has led me to think very much upon the subject, and prompted me to report them in view of and immediate connection with the article upon the subject of dropsical accumulations that appeared in the last number of the Stethoscope.

The treatment of the cases reported was, as will be ob-

served, a tonic plan, alternating with the one thought best suited to the special diseases most prominent; and this was essential, in view of the greatly enfeebled and scorbutic condition of the state prisoners. Calomel was always administered with great apprehension, and in some instances with very bad effects.

Before proceeding with a detail of the cases, I will merely call attention again to the fact, (which I can but regard as significant.) of the connection of these pleuritic effusions with the scorbutic condition.

Stokely, a free negro confined in the Virginia penitentiary, aged 35, admitted to hospital treatment 12th May 1854. He presented an emaciated appearance, but did not *feel* much debilitated; pulse frequent, with good volume; tongue but slightly coated; bowels irregular; appetite indifferent; complained of difficulty of breathing and troublesome cough, and the violence of both increased by the slightest exertion. The difficulty of breathing had become more and more uncomfortable, and the cough more urgent for several weeks past; had suffered occasional pain, or rather uneasiness in right side "for some time past." What his health and habits had been previous to his confinement in the prison could not be satisfactorily ascertained. Percussion disclosed considerable dullness over inferior portion of right lung, extending as high as the fourth rib. The stethoscope discovered a respiratory murmur *very much* enfeebled in the lower portion of right lung, but more distinct above, and in other respects natural, if we may except an occasional mucous râle. Slight friction sound was thought to be observable; respiration on opposite side rather rude; little or no expectoration. R̄ Iod. pot. grs. v, three times a day, to be gradually increased.

This treatment was continued until the 19th May, when the medicine appearing to disagree with the stomach, was discontinued, and the following ordered: R̄ Pulv. ipec. et opii. grs. vi; hyd. chlo. mit. grs. ij; pulv. scillæ grs. ij, morning and night, with warm sage tea; blister over right side.

This treatment was continued with decided benefit to the

23d May, when a laxative was ordered. The patient expressed himself decidedly more comfortable, although somewhat more debilitated, and with a loss of appetite. No medicine for a few days. And as he exhibited decided symptoms of scurvy, he was directed antiscorbutic diet.\*

May 25th— $\mathcal{R}$  Iod. pot. grs. x, and continue diet.

On the 27th, cod-liver oil was added to the treatment, which was continued to May 31, with very evident amendment.

June 1st—Continue treatment and give wild carrot seed tea, acidulated with cream of tartar, as a common drink. At this stage of the disease debility seemed to be the most prominent symptom, as both auscultation and percussion as well as the rational symptoms, proved the chest symptoms very much relieved.

June 5th—Suspend iod. pot. and give  $\mathfrak{z}$ ii comp. tinct. cinchon. three times a day in conjunction with the cod-liver oil.

This treatment was strictly adhered to, with turpentine frictions over chest, and antiscorbutic diet, up to the 16th June, with very decided improvement in general appearance, strength and physical signs.

June 17th—Continue comp. tinct. cinchon. and cod-liver oil, and give Dover's powder, grs. viij, nit. pot. grs. x, at night, in warm sage tea.

This treatment was continued to the 22d June, when the patient was attacked with a very active diarrhoea.  $\mathcal{R}$  Quinine, grs. v, tannin gr. i, every five hours, and discontinue other medicine.

June 23d—Diarrhoea checked, and medicine discontinued.

June 24th—Ordered laxative. From this to 28th June no medicine was given.

June 29th— $\mathcal{R}$  Cod-liver oil  $\mathfrak{z}$  ss and Griffith's mixture  $\mathfrak{z}$  ss three times a day, with full diet.

This treatment was continued up to the 6th of July 1854,

\* Antiscorbutic diet consisted of full vegetable diet, with an acid mixture of lemon juice, cream of tartar, &c.

the patient rapidly improving, when his period of confinement expired, and he was discharged from the prison.

CASE II.—Scott, negro man, aged 35, confined in Virginia penitentiary, admitted to hospital treatment on the 14th June 1854. He was a remarkably robust and athletic man, and had enjoyed good health ever since he had been in prison. Had occasionally experienced some pain, or rather uneasiness in his left side, but not enough to occasion any anxiety. Difficult respiration, becoming exceedingly oppressed under ordinary exertion; cough exceedingly troublesome, with but little expectoration. Patient *looked* remarkably well; pulse a little frequent, and skin soft; tongue clean, bowels regular, and in fact all the functions of secretion and excretion apparently healthily performed. Symptoms of scurvy. Percussion discovered *complete* dullness over the entire left side of the chest from base to apex. Auscultation revealed little or no respiratory murmur, and no other sounds detected. R Hyd. chlo. mit. grs. xii; comp. ext. colch. grs. x, given at once.

June 15th—R Hyd. chlo. mit. grs. ij; pulv. scillæ grs. ij, every 4 hours, and Dover's powder, grs. viij, at night, in warm sage tea. Antiscorbutic diet.

This treatment was continued until 20th June, and then discontinued for fear of the mercury.

June 21st—No appreciable change. R Syr. scillæ 3i, and tinct. digital. gtts. x, three times a day, and continue antiscorbutic diet.

Treatment continued to 30th of June, when the following was substituted: R Pulv. Dov. grs. v; pulv. scillæ, grs. ij, three times a day, and tinct. digitalis, gtts. x, three times a day; lemonade with cream of tartar as drink.

July 1st—Continue treatment, and purge with jalap and cream of tartar every third day.

Treatment continued to the 9th July, with decided improvement, when turpentine friction over chest was added.

Same treatment to the 12th July, when squills and digitalis were given through the day, and 10 grs. Dover's powder in

warm sage tea at night, not omitting to purge every third day.

Continued this treatment up to the 25th of July, the medicine acting very finely in accomplishing the objects of its administration, by acting alternately on the skin, kidneys and bowels, more particularly the skin, and the patient improving rapidly.

On the 26th July, digitalis was omitted, and other medicine continued to 29th, when all medicine was discontinued, with the exception of giving Dover's powder three times a day in warm sage tea.

Aug. 3rd.—The squill and digitalis were recommenced in conjunction with the Dover's powder. Continued to 8th of August. Discontinued, and R: Pulv. ipecac and opii. grs. 5, nit. pot. grs. x, three times a day, with frictions and full diet.

No other treatment was resorted to from this time to 23d of August, when the effusion had been so completely removed, and the lung so far regained its healthy functions, and strength restored, that the patient was discharged. Since that time his health has been comparatively good, and his lung, formerly flooded by water, now acts as freely as the other.

CASE III.—Strader, white man, aged twenty-two, confined in Virginia penitentiary, admitted to hospital treatment June 25th, 1854. Had felt himself for some time past becoming gradually enfeebled, and feeling occasional pains in the chest; difficult breathing, with troublesome and harsh cough, aggravated very much by exercise; pain in lower extremities, with impeded motion. His general appearance was puffy and anæmic; gums swollen and spongy; lower extremities covered with petechial spots; pulse frequent and feeble; appetite variable, and bowels irregular. Percussion over the chest showed very great dullness over its left inferior portion; sound increasing in clearness as we ascended towards the apex of the lung. Right side more resonant than natural. Auscultation

tion revealed a very greatly enfeebled respiratory murmur in lower lobe of left lung, scarcely audible. Some friction sound high up on the pleural surface, and an *interrupted* or *wavy* inspiration. This *interrupted* or *wavy* inspiration led me to suspect something most serious going on within the cavity of the chest than mere effusion within the pleural sac. On the right side the respiration was puerile and in other respects normal. R Blister over left inferior portion of chest, and to have antiscorbutic diet, with lemon juice and bitartrate of potash. The lung was examined at intervals, up to July 1st, and no material alteration found to have taken place.

July 1st—Ordered frictions over the chest, with Croton oil, and  $\frac{3}{4}$  ss of cod-liver oil three times a day, and continue other remedies. Give cod-liver oil in a glass of porter. Continued to 7th July. Blister chest, and continue.

July 8th—Give 5 grs. iod. pot. three times a day with cod-liver oil and acid mixture.

This treatment was continued to the 13th July, with decided improvement in general appearance and very perceptible amendment in the condition of the lung.

July 14th—Discontinue former medicine, and give 3 grs. calomel morning and evening, and water acidulated with cream of tartar as a common drink.

This treatment continued to the 16th, when calomel was omitted, and 2 grs. of squill and 5 grs. Dover's powder were given three times a day, with warm sage tea at night. Continued treatment to the 21st July. Suspend medicine, and purge with jalap and cream of tartar.

July 23d—R Cod-liver oil  $\frac{3}{4}$  ss and 30 gtts. syr. iod. ferri three times a day, and 10 grs. Dover's powder at night in warm sage tea. Continued treatment to 27th July. Purge with jalap and cream of tartar.

July 28th—Resume cod-liver oil and syrup iod. ferri with the Dover's powder and sage tea at night. Continued to 3rd of August. Purge as before, and then resume medicine. Full diet.

Aug. 6th—The patient very much improved. Blister over

chest, and add 10 grs. nit. pot. to the Dover's powder at night, and continue oil and iron.

Aug. 10th—Purge, and resume treatment. Treatment continued to 16th of August, when the Dover's powder and nit. pot. were discontinued—and continue cod-liver oil and syr. iod. ferri.

This treatment was continued to the 24th of August, when the patient was discharged in apparent good health, but with slight dullness and *wavy inspiration* on left side.

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### Operation for Cystic Sarcoma.

BY J. A. HUNTER, M. D. LEWISBURG, VA.

Rev. Michael Bragg, æt. 46, consulted me in regard to his condition, which he supposed to be hydrocele.

Upon a critical examination of his condition, I soon discovered his apprehensions to be unfounded; and yet in my own mind, I was not perfectly satisfied as to its strict pathological character. Indeed, I felt undecided whether it was a tuberculous disease of the testis, or some encephaloid disease. The scrotum was enormously distended, the swelling extending up the cord to within an inch of the abdominal ring, enveloping the penis entirely, except the glands. It was hard and firm to the touch—no fluctuation—and yet not sufficiently heavy to indicate fleshy degeneration. The appearance of the scrotum was very unfavorable—a condition resulting entirely from the irritating effect of the urine upon the integuments—for which I ordered soothing applications—and directed the use of a suspensory bandage, in order to relieve the tension and pain existing at the abdominal ring, and also to remove an undue weight from the spermatic cord and vessels. As a curative remedy, I advised castration, as soon as the system could be prepared for it; which advice he was satisfied to adopt. Believing the disease to be of a sarcomatous character, I directed a mild alterative course, in order

that the ultimate result of an operation would be more reliable. On the 29th day of July, I performed the operation, assisted by Drs. Levisy and Smithee of this place, upon the plan of Desault. Time of operation, 12 minutes.

First incision commenced directly over the abdominal ring, and extended to the most inferior part of the tumor, through the superficial fascia, down to the cord, dividing the external pubic artery—separated the cord from its surrounding connections—likewise the blood vessels from the vas deferens—secured them separately—cut through the cord, and then proceeded rapidly to dissect out the tumor. Sustained the skin in apposition by three sutures, and then applied narrow strips of adhesive plaster. A light cloth, kept constantly damp, was laid over the wound. Loss of blood about 4 ozs.—weight of tumor, 2 lbs.

30th July—Found the patient doing well; some general febrile excitement; bled him  $\frac{3}{4}$  vi, and ordered a saline draught; found the wound disposed to heal by the first intention.

31st—Patient uneasy and restless; considerable swelling; describes a burning sensation following the inguinal canal. Ordered an aperient and the application of a large emollient poultice, and for the night an anodyne.

1st August—Patient doing better; swelling abated; burning mitigated, together with free suppuration from the most pendant point; pulse 85; appetite craving.

2nd—Patient still improving; the parts very much reduced in size; suppuration free; burning still evident; continued the emollient, and at night a purgative.

3d—Found my patient in fine spirits; said he felt more comfortable than he had for six months past; spoke of his recovery now with confidence; wound healing rapidly.

7th—Four days after my last visit; find my patient convalescing rapidly. To-day, two ligatures came off; wound healthy; scrotum nearly its natural size; anxious to return home and resume his ministerial duties.

13th—This day discharged him; all the secretions healthy;

suppuration scanty, only requiring for his entire recovery his personal attention.

14th—Returned home, a distance of 18 miles, without any inconvenience.

REMARKS.—This case is one of more than ordinary interest, not only on account of its etiology, but its rare pathological character.

The specimen is now in my collection in fine preservation. It seems to be a congeries of small cysts, of various size and shape, from a small mustard seed to that of a bean, each filled with an albuminous looking fluid. In order to preserve the specimen, I made no dissection of the tumor—consequently cannot say that there remains a physiological trace of the testicle—believing that the entire gland was changed into cysts. The tunica vaginalis was adherent generally, and the spermatic cord and vessels much larger than the natural.

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### The Dog Fennel.

BY JOHN P. LITTLE, M. D. OF RICHMOND, VA.

As this is the season of the year when the above named plant is in bloom, and as it possesses some valuable medicinal qualities, I have thought it advisable to call the attention of the profession to its virtues.

I do not give the botanical name of this plant, for the double reason that I am not acquainted with it myself, and because if I gave it alone, the larger part of my professional brethren would never be able to find out what herb was meant.

The plant may be met with, growing on hill sides as well as on low grounds, beside water courses. Its height is ten or twelve inches, and it bears a small flower with a yellow centre, surrounded by a circle of small white leaves. It resembles the daisy in appearance. The leaves are very small

and fine, something like those of the yarrow, and flowers, stem and leaf have a strong aromatic, rather offensive odor.

The whole plant may be used, the tops especially. The flowers are, however, more valuable than any other part, and should be gathered at the present time and used.

The plant has two properties. In the green state it is an irritant, and will blister the skin if applied externally.

It is also anodyne, and this property can be preserved by making of it an ointment. Let the tops and flowers be gathered and stewed in lard, in the usual manner of making such ointments, as directed in Dispensatories.

I have found such an ointment of great service, applied to the throat and chest of children suffering under coughs and colds, or threatened with croup. It is in this class of cases that I have chiefly used it, although I suppose it could be applied as an anodyne stimulant application to any painful part. It may be used with the youngest infant. I would recommend it especially to physicians practicing in the country.

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### **Reply of Professor Wellford to *Æquus*.**

“First, let me talk with this philosopher.”

A gratuitous and unprovoked assault upon the sincerity of my course on the subject of medical reform, has been made in the June number of the *Stethoscope*, by a writer who conceals his identity under the fictitious signature of *Æquus*. I have no great respect for writers of offensive or injurious anonymous letters or paragraphs in the public prints. Few people have. But if *Æquus* thinks that his article will command more consideration and regard under a fictitious than under his real name, I have no warrant for disputing the propriety of his choice. He is the best judge of this matter, and has of course adopted the plan best calculated to enforce his views. When, however, the drawer of an obligation is unknown, or of questionable solvency, the endorser, who

gives character and currency to the bill, is the party really responsible, and in a moral point of view more emphatically, if he participate in the benefit of the discount. In the present instance, the editors of the *Stethoscope* occupy this relation to the communication of *Æquus*. If one so skilled in strategy will excuse me for offering a suggestion, I would beg leave to recommend for his perusal a certain fable, which I believe has been occasionally referred to, the most prominent characters in which are a monkey, a cat and some chestnuts in the act of being roasted. When he has studied this apologue with sufficient care, he may be able to make the application to the subject in hand, without further assistance from me.

But we will not permit the tactics of *Æquus* to detain us longer from his rhetoric, and that I may not expose myself to the charge of misrepresenting him by presenting garbled extracts, which do not contain his full argument, I will quote from his production the whole of the passages in which I am interested, and on which I shall offer a commentary, and request the printer to insert the quotations in distinctive type, so that by reading them continuously, the whole subject will be presented.

Adopting as his text a paragraph, from the May number of the *New Jersey Medical Reporter*, which alludes to an address delivered by me to the American medical association at the meeting in New York; *Æquus* proceeds to say :

“Now let us see what evidence of the good seed, sown in the address of Dr. Wellford, affords.”

There is an instinctive feeling in humanity, which regards with awe and apprehension any mysterious and unintelligible danger, and the bravest heart cowers before it, because not understanding its character, resistance is impotent. Such is my position with reference to this forcible passage. It doubtless contains, or is supposed by its author to contain, some idea, and that idea may be of fearful import to me. But until it is disclosed, I must remain in fearful apprehension of a hazard, which I cannot estimate, because of the art with

which it is concealed. I have pondered over its mysterious characters, and have risen from the task discomfited. I am unable to extract from it the first "inkling of an idea." I may not conclude that it is nonsense, and must therefore admit that the fault is in me and not in the author. He was certainly under no obligation to furnish me with brains, and if he were, it might have been inconvenient to trespass on a supply which does not appear extravagantly large even for home consumption. I confess myself floored on the first round, but excited by the strength and originality of the succeeding remark, am able to come up to time.

"We are in the habit of judging of men and of associations *more by what they do than by what they say.*"

This is undoubtedly sound doctrine, notwithstanding its novelty. The instruction afforded me by this wise remark, may be of service to me on some future occasion. "I thank thee, Jew, for teaching me that word."

"Now, what Dr. W. says in his address upon this subject, is not only eloquently and handsomely said, but would seem to evince that the good seed had not only taken root in his own mind, but that his earnest desire was to scatter the same good seed broad cast over the whole land!"

Æquus is again involving me in his dark clouds of mystery. What subject is he talking about? I have not said a word about judging people by what they do or say. I do not claim the distinction of originating anything so sublime. I would not deprive Æquus of the credit of it for the world. And as to the seed, I candidly admit that I have not enough agricultural experience to know, after "good seed has taken root," how "to scatter the *same* good seed broad cast over the whole land." Æquus is probably better informed on this subject, and I submit to his judgment.

"But what effect will the liberal spoken sentiments of this address have upon the medical community, when they see the gentleman who gave utterance to these liberal sentiments of reform, even while his own words are sounding in his ears, have a noble opportunity presented

to him for carrying into effect these principles, just now so eloquently advocated, fail in making a single step of progress of any practical utility in medical reformation. This opportunity was first presented to Dr. W. when the medical college at Richmond was reorganized, and he was made one of the trustees, or a member of the board of visitors. A second opportunity was offered him, when he was taken from that board, and made a professor in the school. In what degree do we find his actions in unison with his words? Which of the measures for medical reform have been carried into effect? It is true that the length of the college session has been lengthened a few weeks. This is the grand result! But has the school come up to the recommendations even of the American medical association? Is a good preliminary education required before a student can enter the school, or any certificate from a preceptor required, or even any degree of medical information? Or is the standard of requirements for the degree of doctor of medicine of a higher order than it has hitherto been?

If *Æquus* had been so perspicuous as to have specified the liberal spoken sentiments of reform and the peculiar principles which I have had such noble opportunities for "carrying into effect," I should, to use the magniloquent language which the editors of the *Stethoscope* have made their own, have had a "tangible eventuality," to which I should have ventured to reply. I have, however, in the absence of any specific information from *Æquus*, looked over my New York address with some care, and have failed to discover any striking measure of reform which I there advocate, with the exception of the establishment of a state board of medical examiners, constituted in each state, and demanding the diploma as a necessary preliminary to examination for a license to practice. As neither the board of visitors nor the faculty of the college are invested with legislative powers, we may infer that this is not one of the principles which I was expected to carry into effect, at the single meeting of the board which convened while I was a member, or during the only session in which I have acted as a "professor in the school." The truth is, *Æquus* either never read the address to which he refers, or having read it, willfully misrepresents it, by seeking to leave the impression that I advocated measures of reform while a private member of the profession, which I repu-

diate as soon as I become a "professor in the school." As well, however, as we can arrive at his meaning, the "principles" to which he refers are :

1. The length of the session.
2. The recommendations of the American medical association.
3. Preliminary education.
4. Standard of graduation.

With regard to the first: I am happy to observe that it has been discovered, as *Æquus* so elegantly expresses it, "that the *length* of the session has been *lengthened* a few weeks." This "grand result" does not appear to have been ascertained by the *Stethoscope* so late as its December number, although it had been announced for months previously, and was then actually in progress, the session having commenced on the tenth of October, to be continued until the fifteenth of March. In that number a communication appears, lauding a New York school for increasing the session to five months, while it not only does not refer to the same identical "reform" adopted by the medical college of Virginia, but in speaking of the establishment of a "medical university," asks "which city shall have the credit of establishing it? Shall it be Boston, New York, Philadelphia or Baltimore? I wish I could add Richmond to this list; but I believe recent events have rendered all expectations of such a character utterly vain." What these recent events were, neither the writer of the article nor the editors condescended to inform its readers. The remark was, however, quite as well understood by most of the readers in Richmond of this southern journal with northern principles, as it was by the party from whom it emanated.

"It is true, that the length of the session has been lengthened a few weeks. This is the grand result." That which was a subject of laudation when done in New York, is sneeringly called a "grand result," when done in Virginia. "A few weeks." If the admission had been made with the candor and impartiality to be expected from a *scientific* journal—it would have been stated that the session had been lengthened to five months—an experiment on the tolerance of the student

as decided as that made by any other college, ventured on by few of them, and from which some of those which attempted it have been compelled to recede.

We shall perhaps have an opportunity to observe the sincerity of the sentiment announced in capitals and italics, in the editorial inaugural of the number of the Stethoscope which contains this effusion of Æquus, viz :

“LET DISCRIMINATIONS BE MADE IN FAVOR OF THOSE INSTITUTIONS WHEREVER SITUATED, WHICH MANIFEST A LIBERAL SPIRIT *in the amplification of the courses and prolongation of the terms of instruction.*”

I anticipate, however, the insertion of an amendment—provided that this “principle” is not to apply to the medical college of Virginia.

2. “Has the school come up to the recommendations even of the American medical association?”

The American medical association has suggested many “recommendations,” some of which are practicable—others are not. When we are informed to which of these recommendations the school is expected to “come up,” this question will be answered in the affirmative, or a sufficient reason submitted why it has not *gone up*. By the way, this American medical association seems to be acceptable to Æquus only when it can be made the medium of a hit at the college. But we shall get on better after a while. The Stethoscope is about “to contribute its humble effort in the work of arousing the profession to a more just appreciation of its rights and wants, and of struggling up to a more efficient organization—one which will not exhaust itself with the adoption of stereotyped resolutions, and “amuse itself with wordy potentialities—abstractions which have no tangible eventualities—theories that have no practical results.”

3. “Is a good preliminary education required before a student can enter the school, or any certificate from a preceptor required, or even any degree of medical information?”

If Æquus will present himself for graduation, whether with a certificate from his *preceptor* or not, and present a thesis

written with as little regard to the harmonies of English literature as the production to which I am now replying, he will discover whether a good preliminary education is required. The "tangible eventuality" which would be the result of his "wordy potentialities," would very certainly be permission to continue his studies for at least another term.

4. "Is the standard of requirements for the degree of doctor of medicine of a higher order than it has hitherto been?"

For testimony on this subject, I beg leave to refer *Æquus* to the *Stethoscope*, vol. 2, page 276, and to other parts of the same periodical, anterior to the administration of its present editors. On the page specially referred to, he will find the editor who then had control of the journal "*again* takes occasion to say that we believe the standard of graduation is *higher* in the Richmond school than it is in most of the others in the Union." "*Again*" is italicised by me—"higher" by the editor himself. But if *Æquus* is not satisfied with this testimony, I beg to suggest that he challenge one of the graduates of the Richmond school to a discussion of any medical question. He will then be able to institute a comparison between the standard of requirements in his day and in theirs.

"I do not assert that Dr. W. could have made all these changes, but where have been his efforts to do so? Has not his course of *action* rather been in opposition to medical reform, by uniting with and becoming a part of an institution, if not avowedly the enemy of all practical reformation, is one which at least does not come up even to the gentleman's own standard, or that of the American medical association. I must, however, do Dr. W. the justice to say that he is *yet* we believe, *in the abstract*, in favor of medical reform, but believes its *practical application* would prove ruinous to the medical schools."

"I do not assert that Dr. W. could have made all these changes, but where have been his efforts to do so?"

Indeed! Then, I should be pleased to know what *Æquus* did assert. Has he not just asserted, in the next preceding paragraph, that I had a noble opportunity presented to me for carrying into effect these principles? And then specifies two

opportunities. No wonder Æquus should judge men and associations "*more by what they do than by what they say*," when he finds it so easy to unsay in one paragraph what he has just said in another. Verily, under such circumstances, judging a man by what he says would lead to very inaccurate conclusions. But I see how it is. Æquus perhaps feared that he might be suspected of flattery in attributing to a single individual, one of nineteen visitors, who held his office for a very brief space, and then for a few months, one only of seven professors, influence and power enough to accomplish objects which the great American medical association, composed of hundreds of the ablest and most influential medical men in the Union, aided too by the gigantic ability and power of the Stethoscope, has been unable to effect in seven years. I may, however, be mistaken in ascribing this sudden change of position to the delicacy of Æquus. The "preponderance of probabilities"\* is in favor of such theory, but it is possible that the ridiculous absurdity of his assertion might just then have occurred to him, and suggested the necessity for its retraction.

"But where have been his efforts to do so?" And is this the grief? Is this the *gravamen* of Æquus' dissatisfaction with me? Is it for this, that an individual pursuing the even tenor of his way, quietly and unobtrusively, a stranger in this community, with a limited acquaintance and a very few personal friends, is forced into public view under unpleasant imputations, and placed in a false position before his medical brethren, by an indelicate, unnecessary and absurd attack in the pages of a periodical? Will it be believed that the ignorance of Æquus of any efforts on my part to consummate certain measures of medical reform was, even with him, a sufficient motive for a proceeding which, though required by the behests of duty, would have been distasteful to any man of delicacy and refinement. Will it be believed that a disinterested anxiety for the advancement of medical reform was his im-

\* Stethoscope again.

pulling motive? How was that to be promoted by the publication of an article remarkable only for its execrable literature, the impotence of its malice and the folly of its positions. How does *Æquus* know what efforts have been made or are now making by myself, my colleagues and our board of visitors, for the improvement of medical education in our good old commonwealth, and the rearing up of an institution which may supply to the southern country the necessary means of medical acquirement, render it independent of other states, and retain within the borders of Virginia the thousands of treasure which she annually pays as a tribute to the private enterprise and state wisdom and liberality which have originated, nurtured and built up northern colleges. Why should and how should *Æquus* know anything of such efforts. I have not the advantage of enjoying confidential relations with him, I presume, and therefore have been so unfortunate as not to possess the benefit of his counsels. Any efforts, therefore, which may be contemplated, may not be as wise or as well directed as they would have been under more auspicious circumstances. But whether wisely designed or not, when developed, we shall see whether the very disinterested advocates of medical progress, *Æquus* & Co. will lend their aid to any efforts calculated to advance the usefulness and prosperity of the medical college of Virginia. I indulge in no expectation so vain. I do not know who *Æquus* is—nor do I care to know—but it is sufficiently obvious that he with others, with the *Stethoscope* as their patron and organ, aided by the funds and influence of the public printers of the state in “joint enterprise,” are engaged in the laudable effort to pull down and destroy a state institution, designed for the accomplishment of a great end, and as *Æquus* informs us, endowed with state funds.

I would not willingly do a wrong to any of our adversaries—I mean the adversaries of the medical college—not even under the provocation and injustice of *Æquus*, through the assistance if not the promptings of the *Stethoscope*, the “joint enterprise of the editors and publishers.” I have al-

luded to the latter gentlemen, Messrs. Ritchie & Dunnivant. Uninterested usually in such matters, and confiding in their editors, I am willing to believe that they are not aware of the ignoble ends to which their funds and influence are directed, and cheerfully acquit them of all narrow and unpatriotic intent. But I take this occasion to give them a friendly warning—to look to the conduct of their journal. If it have any influence, it is in dangerous hands—dangerous to an important state institution, and to their own pecuniary interests—for if it be permitted to continue merely a vehicle for the vindictive feelings of others, they may finally find, in the emphatic language of the editors, slightly altered, “The medical profession can control its” medical journals, “by the exercise of a power which has never yet been brought into requisition. This power is comprehended in the little word ‘patronage.’”

“Has not his course of *action* rather been in opposition to medical reform, by uniting with and becoming a part of an institution, if not avowedly the enemy of all practical reformation, is one which at least does not come up even to the gentleman’s own standard, or that of the American medical association.”

Cool—decidedly. I like that. It is a capital hit—neatly executed, and shows that there is something in our facetious friend, after all. But I put it to Æquus, whether it was exactly in good faith, when they were jointly engaged in this pleasant enterprise, and he was kindly embracing the senior editor of the *Stethoscope* with the affectionate enquiry, “art thou in health, my brother?” to give him such a terrible thrust under the fifth rib. And yet it is hard to believe that the amiable and kind hearted Æquus could have intended so serious a wound. Perhaps he only meant a little fun, and designed to perpetrate, with the most innocent simplicity imaginable, one of those cunning hits which persons of a certain sort of talent, like Dickens and Æquus, enjoy so much, and know so well how to administer; so sly, and yet so cutting. Entertaining as it is, however, I must beg Æquus, if it is the same thing to him, when he next wishes to amuse himself in

castigating his friend the senior editor, that he will select some more worthy medium of communication than my shoulders.

But to be serious: if it is possible to retain one's gravity when discussing such twaddle as this. Opposed to medical reform, because I united with and became a part of the medical college of Virginia, does he say? Why, does not Æquus know—certainly every body else does—that his friend and patron and endorser, the very Chevalier Bayard of medical reform, the knight of the spotless shield, the senior editor of the Stethoscope himself, sought a position in this same institution under the old regime, aye, and *again* under the new. And if *he*, so sublimated in his notions of medical reform as to advocate every scheme, however wild or impracticable, and to quarrel with every institution which does not adopt his quixotic views; if *he* could not only be willing to accept but earnestly to seek a chair in the medical college of Virginia, can the sincerity of his coadjutor be confided in, when he asserts that my course of action is in opposition to reform, because I unite myself with the same school? Clearly, Æquus must believe the enthusiasm of his friend is entirely affected, the offspring of illegitimate motive, or he does not believe the medical college the enemy of all practical reformation, and my course of action in uniting with it evidence of opposition to medical reform. Insinuations, or rather assertions of this description, are slanders on the institution, its faculty and visitors. It is *not* opposed to reform, but has done and is doing all in its power to promote the legitimate objects of its foundation, and will, I trust and believe, continue to live and to flourish like a green bay tree, in despite of the puerile efforts for its destruction of Æquus and his allies.

“I must, however, do Dr. W. the justice to say that he is *yet*, we believe, *in the abstract*, in favor of medical reform, but believes its *practical application* would prove injurious to the medical schools.”

Dr. W. is really very much indebted to Æquus for his ingenuous disposition to do him justice. The *onus* of the

medical reform to which he alludes, that which he and his colleagues would give us, is thrown exclusively on the schools. The evenhanded justice of Æquus hath not the extent of informing his readers *when* I believed otherwise than that efforts on the part of the schools to force reform on the medical public, unaided by the profession, the community and the state governments, "would be ruinous to" themselves and also entirely inoperative to any good result. I have always affirmed publicly and privately that they had no exclusive power to effect reform. As well might he expect the president and his cabinet to effect an alteration in the government without the aid and co-operation of the people, as to expect the schools to revolutionize preliminary and medical education without extraneous aid. I will do Æquus the justice to believe that he has penetration enough to be as well aware of this as I am, and as his principal object is to cast odium on *the school*, he will excuse me for believing farther, that it is precisely because he "believes the *practical application*" of his reform "would be ruinous to the medical schools" that he so warmly advocates its adoption. "*Timeo Danaos et dona ferentes.*" Any reform which he or his colleagues may propose, will be, as it ought to be, carefully considered before it is adopted. The fate of Troy by the agency of the wooden horse, conveys a moral which it would be unwise to disregard.

The inuendo contained in this paragraph is, that while I believe medical reform necessary, and that the schools are competent to effect it, yet that since I have been connected with one, I am willing to sacrifice a public good to my individual interest. Now, as I am desirous to avail myself of the newborn anxiety of Æquus to do me justice, I beg to refer him to a public address, delivered by me in Richmond before the Medical society of Virginia in April 1852, when I was not, nor ever expected to be "a professor in the school." If he will oblige me by examining that address, he will find the following remarks on the pages referred to:

On page 16 :

"We remark now, as we shall perhaps hereafter demonstrate, that no effort, however decided and intelligent—on the part of one or more isolated schools, can remedy the existing evils. That remedy is in other hands: meritorious schools, which are honestly endeavoring to elevate the standard for the degree, may aid in its application; but unassisted by other influences, they are impotent to accomplish the objects which every right minded member of our profession so ardently desires."

On page 24 :

"However I may lament the defects of our system of medical education, I by no means wish to contend that we have made no progress—that medicine is not better taught now than it was in the days of Morgan and Kuhn and Shippen.

"I love to look back through the vista of bygone years upon the past, and to yield to the professional worthies who originated medical instruction in this country the homage of my veneration and my gratitude. But in rendering to them this, their merited tribute, I would not brighten the halo of their glory with a single ray abstracted from the distinguished teachers of the present day, nor wither one leaf of the civic wreath which encircles their brows. Nobly have they won their honors—long and richly may they wear them. I know many of them personally and well; I know their ability, their honesty and their zeal; I know their love for their profession and their anxiety to advance its honor, its fame and its utility. Let it be ours to investigate, and so far as we can, to remove, the counteracting influences which now impede their efforts, and relieve them from the false position which the sordid motives of others compel them reluctantly to retain."

On page 31 :

"No matter how desirous some schools may be to effect the desired reformation—they cannot succeed unless sustained by the unanimous action of the privileged institutions. It is not to be anticipated that this will ever be attained—and if it were, such is the facility for obtaining charters, that other aspirants would avail themselves of the illegitimate advantage, and establish new schools of lower grade, which would monopolize patronage. Let us not, then, censure the schools for failing to do that which is manifestly impracticable."

And on page 36 :

"But no matter how intelligent and successful the investigation of

the causes which impede the progress of medicine—no matter how wise and judicious and well adapted the remedies suggested—no matter how distinguished or zealous or influential the individuals engaged in the movement—all will be unavailing so long as our efforts are isolated and unconnected. Concentrated, combined, harmonious, organized action, directed with energy, perseverance and zeal to meritorious objects, sanctioned and approved by all, and conducive to the best interests of the community as well as of ourselves, can alone be successful. The interests of the schools, the interests of the laity, the interests of the public are one and identical. Let there then be no divisions among us, but let us adopt a platform large enough and strong enough to satisfy and sustain us all."

If these extracts do not satisfy *Æquus* that my opinion of the responsibility of the schools has undergone no change, they will have that effect on others, which will answer my purpose as well.

*Æquus* next proceeds to pitch into the medical journals and the American medical association. I shall not enter on the defense of either—they are fully able to take care of themselves. The querulous tone of *Æquus* and his comrades of the *Stethoscope* is, however, really a subject of entertainment to all the readers of that amusing journal. They are as hard to please and as great adepts at scolding as Mrs. Caudle herself. Like that agreeable and good humored lady, nothing can be made to suit their notions of propriety. The old faculty did not please them; the legislature did not please them; the charter did not please them; the appointment of visitors did not please them; the action of the visitors did not please them; the new faculty does not please them; the American medical association does not please them; the medical journals do not please them. And having exhausted all other topics of discontent, the exuberance of their genius is now directed to individuals, where they will doubtless find an inexhaustible fund of material. But like the rays concentrated by a lens, all their indignation, every grief, and every impropriety, real or imaginary, is visited on the schools.

I once had a friend, a most benevolent and excellent gentleman, who, at the sheriff's sale of a miller's effects,

purchased a servant, who was the miller's assistant and property. The miller requested that he might be allowed to retain the servant, as essential to the management of his business. To this my friend assented, but the servant begged that he might not be required to return to his former master, for, said he, "Master blames me for everything, whether I have anything to do with it or not. When he is picking the mill-stone, if the hammer slips and cracks his fingers, he comes right up and knocks me down with it."

And so it is with the Stethoscope and the schools. No matter what it is that goes wrong, or is supposed to go wrong by these ultra reformists, if ideas for an editorial will not "come when they do call them," or any other cause of vexation arises, whack falls the hammer on the head of the devoted schools. Having dealt with them in the aggregate, "*usque ad nauseam*," attention is now directed to the individuals connected with them. I have had my turn. My colleagues in detail will, I suppose, come next. May Heaven grant them a safe deliverance.

B. R. WELLFORD.

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 EDITORIAL.
 

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**Editorial Reply to Professor Wellford.**

"When, however, the drawer of an obligation is unknown, or of questionable solvency, the endorser, who gives character and currency to the bill, is the party really responsible, and in a moral point of view more emphatically, if he participate in the benefit of the discount. In the present instance, the editors of the *Stethoscope* occupy this relation to the communication of *Æquus*."

PREFATORY to a reply to Professor Wellford's article, we would remark, that it is customary, under such circumstances, for the aggrieved party to demand the name of his assailant, and conduct the controversy with him. Editors are not responsible for the statements of correspondents, unless they refuse to comply with such a demand. But Professor Wellford has elected otherwise; and *now* we shall not avoid the responsibility thrown upon us in the above paragraph. This is agreed.

But having "participated in the benefit of the discount," withstood the volley of his hate and the shafts of his satire, we enumerate the privilege of full reply, as one of the "benefits left" us in our misery; and we shall proceed to defend ourselves and our journal from his aspersions, and to justify the position of *Æquus*.

From the programme which had already appeared in one of the daily presses, (and which bears a striking resemblance in tactics and phraseology to the denouement of Professor Wellford,) we were fully prepared for the character of the assault to be made upon us.

From certain "givings out," we were listening for the dis-

tant mutterings of the wrath soon to break on our devoted heads. We braced our nerves for the shock, familiarized our minds to the savage instruments of torture, being forced to tear our flesh. Well, we have sustained the operation, and that without anæsthetics. Perhaps we were *mesmerized*; but we find ourselves breathing freely, with no unpleasant reactions. Our tormentor, when he reached that part of the drama which was to be the chef-d'œuvre of his skill—that part which was to his taste, and on which he trilled with delight—drew on the sacred repository of a past conflict—one in which he arrived on the field of action just in time to share in the spoils of the victory.

But to lay all figure aside, we have risen from the perusal of Professor Wellford's twenty-three mortal pages of manuscript, (written professedly for the purpose of correcting the "intentional misrepresentations" of *Æquus*, but really for purposes which we will endeavor to make apparent in the progress of this discussion)—we say we have risen from the perusal of his article, in the humor for a calm consideration of the many topics presented, pertinent and extraneous, and with some knowledge of the wily resources of our opponent.

We cannot forbear remarking at the outset, that if his only object was self-defense against the charges of *Æquus*, how singularly unfortunate, how peculiarly delicate, how environed with difficulties must have been the fix in which three paragraphs of "twaddle" placed him, to require so elaborate an effort for his extrication. But when such a dainty dish as the Professor has placed before us comes up for discussion, we feel at some loss which point to attack first. He displays so much skill in avoiding the only issues presented by *Æquus*, that we wonder he did not ignore them altogether, (as soon as he had announced the editorial responsibility,) and proceed at once to that ulterior object, in view of which he has evidently been long whetting his appetite. But we shall nail him to these issues. They involve questions of interest to the public and the medical profession—something of more importance than shivering a lance with this redoubtable knight

of the "harmonies of English literature." He must pardon us for merely adverting to the "instinctive feeling" of "apprehension" and "awe," with which he approached them. His sensitive nerves are so shocked by a typographical error, (so clearly revealed by the whole context, that a "wayfaring man" could not err therein,) and an expression, however inelegant, (yet which is distinctly revealed by the context also,) that he intimates a willingness to have an addition to his stock of brains—seems completely thrown on his beam's end—his mind a perfect blank, with no perceptions, save shadows of some dark and mysterious evil, before which he "cowered," being "impotent" for "resistance." Dreadful, indeed, must have been this shock, if Professor Wellford could have been for a moment oblivious as to the recommendations made by the national association to the schools of medicine, and to *his own personal agency* in maturing and developing those recommendations. He seems to have been greatly nonplused in arriving at the meaning of *Æquus*; but we are glad he at last "came to himself," and "came up to time."

We have studied the exceptionable paragraphs from *Æquus*, not indeed to display our familiarity with Lindley Murray, but (as the duty of an editorial defense has been made imperative) to fully understand the ground we are to occupy.

*Æquus* charges that there is an inconsistency between the expressed opinions of Dr. Wellford and the subsequent action of Professor Wellford on the subject of reform measures in medical education—and to sustain this allegation, he asserts that the school with which he is connected has not put into practical observance the reforms which Dr. Wellford had himself endorsed. He farther asserts, that the connection of Dr. W. with such an institution—"one which does not at least come up even to the gentleman's own standard or that of the American medical association," places him in the position "of opposition to medical reform," he having failed to improve opportunities offered him, or to give any evidence of effort on his part to institute these reforms.

Such is the substance of the charges which has called forth such an acrimonious and denunciatory reply. We shall examine them in detail, and see if they cannot be made good. We wish we had space to show fully Professor Wellford's connection with the association, his zeal in attending its sessions, and his services in the cause of reform.

We must content ourselves with a rapid sketch, drawn from the records. We find him a member of the national convention which assembled in Philadelphia in 1847, and a member of the committee on medical education. We find him again at the first meeting of the association which assembled in 1848. With others, he made his report on medical education, to which is appended a string of resolutions, embodying the result of their deliberations. Resolution 4th is in these words:

"Resolved, that this committee reiterate and strongly recommend to the association a practical observance of the resolutions appended to the report of the committees on preliminary education, and on the requisites for graduation, submitted to the medical convention which assembled in Philadelphia in May 1847."

The reports of these later committees embrace almost the entire scheme of reform, as contemplated by the association. Our readers are familiar with them, and they have been often urged through the pages of the Stethoscope. They have been iterated and reiterated during almost the entire existence of the association.

We find, then, Professor Wellford thoroughly committed to all these measures, and recommending them to "*practical observance.*"

We copy also two additional resolutions, presented by Dr. Wellford's committee:

"Resolved, that the faculties of the medical schools be advised and requested carefully to examine students after their attendance on the first course of lectures, to issue certificates of proficiency to such as merit them, and to regard the possession of such certificate, and attendance on another full

course of lectures subsequent thereto, as indispensable preliminaries to a final examination for the doctorate.

“Resolved, that this association recommend to the faculty of each medical school to conduct the final examination of candidates for the diploma in the presence of some official person or persons properly qualified to recognize the attainments of the candidate, but who has no pecuniary interest in the institution or the number of its pupils.”

Now, let the reader be informed that there is appended to the end of this report a note, which says, “Every individual on the committee has taken a part in the preparation of their report.” So there is no method for the professor to avoid his share of responsibility in these premises. But we are not dependent on the sentiments of these resolutions to prove the degree to which Dr. W. is committed to measures of reform in medical education. We have his own abundant writings, in which he develops fully his view of the causes of the disease, for which the above resolutions constituted the remedy.

In his address, delivered to the American medical association as late as May 1853, page 64, we have the following:

“Medical education, under a vicious system of rivalry among the schools, was rapidly deteriorating; and the laudable exertions of the more eminent teachers were impotent to counteract the sordid efforts of minor institutions, resolved to sustain themselves, regardless of their own reputation, or the dignity and usefulness of the science they professed to teach. The honors and emoluments of medical professors had excited the ambition and cupidity of aspiring individuals throughout the country; charters were profusely granted by the different states; degrees were obtained with so much facility that many entered the profession without proper qualifications, either literary or moral, and the title of doctor of medicine, which had for centuries conferred on its possessor veneration and respect, was, in many parts of the country, shorn of its high and ancient honors; bestowing no enviable distinction, and meriting no regard.”

In his address to the medical society of Virginia—page 11:

“The enquiries instituted by the American medical associa-

tion appear then to have established the fact that the most influential impediments to the advance of our science in the United States are defects in our system of education, both preliminary and medical, and that such impediments have not only existed heretofore, but are even now operating to a calamitous extent."

And on page 16 :

"But, however imperfect the preliminary education of the medical student, it cannot well be more superficial than his subsequent medical course."

Pages 17, 18, 19 :

"What, then, is the course too frequently pursued by medical students in this country, without let or hindrance either by legislative or scholastic interference? He enters the office of his preceptor, as I have already shown, and as we all know to be the fact, without any enquiry into his previous education. If he has been so fortunate as to have received instruction in the ordinary branches of an English education, and to have acquired a knowledge of ancient languages, it is well; but if he has not, it is not demanded as a prerequisite, any more than if he were about to attempt to learn any ordinary mechanical trade. He reads, or professes to read, medical works in his preceptor's office for about eight months—a few months more or less, as the case may be. During this period he learns something of *materia medica* and pharmacy by preparing medicine for the daily prescriptions of his preceptor; but even this is an advantage not always enjoyed, and in the large cities of the Union, never. He is advised what books he should read, and they are furnished him, and such explanations are given him as he may from time to time require; but beyond this he receives little instruction, and is left to his text books and his Medical Lexicon to get along as well as he can. If it so happen that he is industrious and ardent in his pursuit of knowledge, he is generally found in the office engaged in study; but if otherwise, various seductions are ever ready to induce neglect of office hours, and he consoles himself with the expectation that the lectures of the ensuing winter will retrieve all loss of time and give him the requisite information, without the self-denial demanded by solitary and laborious study. The winter approaches, the lectures commence, and perhaps for the first time he enters the precincts

of a splendid and attractive city, with an acute sensibility for its excitements and its pleasures. He purchases the tickets which will admit him to the lecture rooms of his professors, but whether he avails himself or not of the privilege they are intended to confer is an affair regulated exclusively by his own inclinations. Perhaps he is attracted by the eloquence and ability of one or more of the professors, votes the others humbugs, and either absents himself from their class rooms or amuses himself while there in some of the various modes which the proverbial wit and mischief of medical students so readily concoct. No test of his attendance or his progress is demanded, no faithful nor rigid study is exacted, no examinations are instituted, no recitations required. He may dissect if he choose to do so, but if he does not he may let it alone, as in many of the schools a knowledge of anatomy thus acquired is not made necessary to obtain a degree. Nor is clinical instruction made obligatory—some of the colleges have no hospital under their control, others substitute a weekly clinique, and others disregard the subject altogether.

“But if a practical knowledge of anatomy and clinical information are not conditions precedent to the honors of the doctorate, attendance on two courses of lectures is—or rather the possession of two sets of tickets; for if a *soi disant* student is so inclined, he need not actually attend lectures at all, because no evidence whatever is required that he has done so, but the possession of his tickets entitles him to claim his examination for a degree at the close of the second course of four months' lectures as a matter of right. Accordingly, at the termination of his first course of lectures, he returns to his preceptor's office, where he spends his summer pretty much as he had the preceding, attends the next winter on the lectures *ut antea*, is examined the next spring, obtains his diploma, and his medical education is complete. I appeal to every physician now present to say whether this is not a correct statement of the progress of many medical students, from the commencement of their pupilage to its close. Of course, I do not wish to be understood to intimate that it is generally so, or that it is even a *very* frequent occurrence; but that it is a veracious history of many cases, and that there is nothing in our present system to prevent examples of this sort, will, I presume, be readily admitted. But it may be said, that while the student has it in his power to be as regardless as he pleases of the opportunities of instruction afforded him, the development comes with his examination, which exposes his negligence, and his rejection ensues as a necessary consequence. Such would doubtless be the fact if a single examination be a

sufficient test of qualification, and that examination be so conducted as to fulfill its intended function; but whatever be the cause, the fact is unquestionable, that entire incompetency is not always a bar to the attainment of the diploma. Of this fact, if it were not one of common notoriety, the records of the army and navy boards afford conclusive evidence. We are informed by two naval surgeons of eminence, in a communication to the American medical association in 1848, that in an examination "before a recent board, one gentleman defined a lotion to be a 'kind of application,' and an evaporating lotion, 'one that does not evaporate.' Another confessed his ignorance of the freezing and boiling points of water, and contended that knowledge on such points was useless. One candidate determined castor oil to be the 'oil of castor—an animal.' Another located the solar plexus in the sole of the foot. *All these were graduates.* The most ardent advocate for the American system of medical education will scarcely contend for the perfection or even sufficiency of any system which would invest with diplomatic honors examples such as these."

Page 25 :

"One of these circumstances, in the opinion of many of the most disinterested and accurate observers, is the unnecessary multiplication of schools authorized to grant the degree of M. D.; a degree which confers an equal rank, and is equally a passport to public consideration, whether issued by the most obscure or the most accomplished and eminent teachers in the land. Competition is said to be the life of trade, and so to a certain extent it doubtless is; and the remark is equally true applied to almost every other object of human avocation as it is to merchandise. Even in the learned professions, a certain amount of competition tends merely to excite salutary emulation, and conduces as well to the benefit of the public as to the improvement of the individuals immediately interested. But so soon as the supply exceeds the demand, the article manufactured or vended deteriorates in quality, that it may be afforded to the purchaser at a smaller price, and not only afford the usual profit, but enable the vender to attract the customers of his competitor, who is thus compelled to resort to similar expedients. Then succeeds a system of puffing and underbidding, and the adoption of every other disreputable artifice. The number of competitors increasing, new purchasers are induced, by the apparently decreased price, which is in truth owing to the worth-

less character of the article, until finally the suffering public detects the fraud, the trade is ruined, and its prosecutors consigned to merited disgrace."

Page 26 :

"But it is painful to remark, that among the forty schools there are many which are mere trading concerns, established from sordid motive, and continued without those lofty aspirations for reputation and usefulness which make 'ambition virtue.' But though powerless for good, such institutions are potent for mischief. Pupils may be obtained, and every inducement is offered, not only to those who are already engaged in the study of medicine, but to others who have not selected their vocation, to buy their tickets, with at least a tacit assurance that the degree shall be granted with the least possible expenditure of time, money or intellect. Fees are cheapened, terms of study are abbreviated, examinations reduced, until the Doctor Last of the great English comedian is no longer a fictitious character, and the perfection of machinery for all other manufactures must yield, in celerity of execution and certainty of effect, to that patented for the making of doctors."

And our last quotation is from page 27 :

"There was a time when some little talent and attainment were considered necessary for high political office or a position in either of the learned professions, but now '*nous avons changé tout cela,*' and the apprehension may reasonably be entertained, that without a united and vigorous effort to sustain its ancient glory, medicine, like the lost pleiad, will disappear from the brilliant constellation of sciences, which has for so many centuries challenged the respect, the confidence, and the admiration of mankind.

The necessary result of all this is a too crowded profession. About 1600 pupils are annually converted into graduates by the aggregate will of the different colleges of the Union, and it is a deplorable truth that many inherit from their alma mater more of cunning and stratagem than of professional skill. The humiliating artifice which she employed to lure them into an occupation for which they were totally unprepared is transferred from the chair of the professor to the office of the practitioner, and the low arts of the demagogue, the self-laudation of the charlatan and the secret arrangements of the hireling, are the filthy byways to patronage which they tread, in

preference to the broad and open highway of a noble and honorable profession."

Now, we presume Professor Wellford will admit (and if he does not, everybody else will so decide,) that the sentiments of the resolutions we have quoted commit him fully to the recommendations of the association, and especially to the *specific measures* of the two resolutions, in the preparation of which he himself *individually participated*.

In the quotations from his addresses, how clear and distinct his perceptions of the disease—how truthful his delineations of its features—how vivid his apprehension of its origin in our system of instruction—how boldly he probes the wound, that concealment might not "skin and film the ulcerous place"—how merciless upon our schools of medicine!

But we turn to the next point in the argument, which leads us to enquire whether or not the school with which Professor Wellford is now connected has actually instituted these reform measures? *Æquus* asserts that it has not gone "up to the gentleman's own standard or that of the American medical association."

Let us see how Professor Wellford answers the questions propounded by our correspondent:

And first, the length of the college sessions. *Æquus* says, "they have been lengthened a few weeks." The professor says to "five months." Well, whether four weeks can be properly denominated "a few weeks," we leave to his critical scholarship to determine. But *Æquus* only asserted on this point, that "the college" had not gone up to the "gentleman's own standard and the recommendations" which he had "strongly" commended to "practical observance." *Æquus* seems rather disposed to give Professor Wellford the credit of a "few weeks" addition to the college session. Doubtless his modesty forbade his assertion of the claim. We say it is a single step in the right direction. Five months are better than four, but six months is the period so strongly recommended to practical "observance."

We consider, then, all that *Æquus* asserted on this point as amply sustained—even admitted by Professor Wellford.

2d question. "Has the school come up to the recommendations even of the American medical association?"

Now, mark the professor's answer. This body "has suggested many recommendations, some of which are practicable—others not. When we are informed to which of these recommendations the school is expected to come up, this question *will be answered in the affirmative*, [italics our own] or a sufficient reason submitted why it has not gone up." Have we here an admission that Dr. Wellford "*strongly recommended*" "impracticable measures" to the "practical observance" of Professor Wellford?

But why impracticable, and in what sense impracticable? Does he mean that the institution of these reforms is beyond the reach of human power? Could not the faculties of the colleges institute them, if they only had *the will to do so*? But Professor Wellford, in his quotations from his address, says, that "no effort, however decided and intelligent on the part of one or more isolated schools, can remedy the existing evils." And again, "they cannot succeed (in such efforts) unless sustained by the unanimous action of the privileged institutions. It is not to be anticipated that this will ever be attained; and if it were, such is the facility for obtaining charters, that other institutions would avail themselves of the illegitimate advantage, and establish new schools of a lower grade, which would monopolize patronage."

But we find that he says in the same connection, that the evil "is incident to the system, for which individual institutions are not responsible." If Professor Wellford is such an earnest friend of reform, we ask why have not his efforts been given to a radical reform of the system itself?

But we hasten on to the 3d question and answer:

"Is a good preliminary education required before a student can enter the school, or any certificate from a preceptor, or even any degree of medical information?"

How wittily this question is answered by Professor Well-

ford. Poor *Æquus*, if you were in his hands, we have no doubt you would fare roughly. What a God send to the Professor is a typographical error on the part of our printer, and your hasty composition, which he uses so adroitly to conceal the practices of "the school" on this subject. You wrote the sentence "now let us see what evidence of the good seed sown, the address of Dr. Wellford affords." Our printer punctuated incorrectly, and added the word "in" after "sown." You also furnished him an inelegancy, "in lengthening the length." Professor Wellford does not know, "after good seed has taken root, how to scatter the *same* good seed broad cast over the land." Why, *same kind* of good seed. We think you wrote it correctly—but the Professor will no doubt discredit our authority, for we find him making merry over a quotation in our inaugural, which was penned by the editor of the New Orleans Medical and Surgical Journal—a scholar—a vigorous writer—and probably the ablest journalist in this country.

But Professor Wellford is awfully troubled about the "harmonies of English literature." And we think we have made a discovery. Some intimation has been given that improvements are about to be introduced, which will challenge the sincerity of some of our declarations. We suspect that the Professor is about to establish a new chair—that of "The Humanities." But this is only a suspicion of ours. If such a thing is really in contemplation, we propose that his anonymous friend "Powhatan" should fill it—that is, unless by prearrangement some one else is in the "line of safe precedents." But Professor W. did not answer *Æquus'* question. Possibly, "the noise and confusion was too great," &c.

And so we pass on to question 4th:

"Is the standard of requirement for the degree of doctor of medicine of a higher order than it has hitherto been?"

Now, reader, look closely to the precise extent of this query of *Æquus*. Dr. Wellford answers it, by saying that the former editor of the *Stethoscope*, in 1852, said, "we believe

the standard of graduation is higher in the Richmond school than it is in most of the others in the Union."

But did *Æquus*' question involve any comparison of the relative merits of different schools? "*Is the standard, &c. of a higher order than it has hitherto been?*"

But Dr. W. evades by challenging *Æquus* to a discussion with one of the graduates of the school. Now, we hope accomplished physicians are graduated in all the schools. There are men who thirst for knowledge, and will obtain it despite of the low standard of requirement for the diploma. But the great question is, are the exactions for the diploma such, that its possession is reliable evidence of attainment—or are the courses of instruction such as to justify a high demand? These are the ends designed to be compassed by the recommendations of the association.

Now, can anybody doubt that Professor Wellford would have answered the questions of *Æquus*, general and specific, in the affirmative, if he could have done it? Would he not, by this means, have triumphantly vindicated his own consistency, and placed the school in a position to challenge the support and friendship of all parties? We take his adroit evasions of these questions as tantamount to a confession. And here we *might* rest the defense, and sum up the evidence.

We think we have found Dr. Wellford inextricably committed to certain measures of reform, which he once strongly recommended to "practical observance." We also find him in connection with a school which he does not pretend has placed these measures in practical operation. This inevitably places him in a position of inconsistency, unless it is made to appear that he has used his best endeavors, but failed in the accomplishment of this object. *Æquus* asserts that he has enjoyed two good opportunities to do so—when he was made a visitor, and when he was transferred to a professorship. We assert that a third and more important one, was when the college charter was obtained. Then governmental agencies might have been appealed to. We know that Dr. Wellford

was a lobby member of the legislature (in a different cause) at the time that the charter was obtained.

Æquus, we think, very considerably asks the question, "But where have been his efforts to do so?" We confess ourselves completely floored by the answer. "*Why should and how should Æquus know anything of such efforts?*"—"I have not the advantage of enjoying confidential relations with him." The professor grows supercilious. Ah! this is the way of it. His efforts are confined to "confidential relations." Much good will they do the cause of medical education, if the fruits are confined to the same privileged bounds!! And we will let him puff off his hauteur in intimations of "efforts which have been made, and are now making, by myself, my colleagues, and *our* board of visitors"—[Italics our own].

But we have intimated above, that the defense of Æquus might be rested here, as the subject matter of discussion has been pretty fully developed.

But Professor Wellford elected otherwise, and we have no alternative but to follow him. If he had confined himself to the limits of his text, "talk with this philosopher," *those other ulterior objects* which we have hinted at, would not have been so fully developed.

We think his whole article exhibits more of passion and hate, and evasion and claptrap, than sound logic or reasoning.

The reader cannot fail to have observed that one of these ulterior objects was to heap as much contempt as possible on the position of the senior editor of the Stethoscope. He speaks of the "affected zeal" of the editor for medical reform—"the offspring of illegitimate motive." Doubtless, the idea of chastising the senior editor, over the shoulders of Æquus, was vastly agreeable. He gloats over the coveted opportunity. "I like that"—"capital hit," says he. But let us see how far reasoning and logic will vindicate his consistency in this quarter. Professor Wellford argues that if the "very Chevalier Bayard of medical reform" could seek to connect himself with the medical college of Virginia—"he

that is so sublimated in his notions of medical reform as to advocate every scheme, however wild or impracticable," surely Professor Wellford should be allowed to do so, without subjecting himself by that act to the charge of opposing medical reform.

This would be sound and forcible reasoning, if both applicants had sought the position, under like circumstances, and used the same means for the attainment of the end.

Dr. Wellford knows—"certainly every body else does"—that the senior sought to attain his end by a revolution in the affairs of the college, and in the usages of appointment to its offices—a revolution which looked directly to a practical enforcement of the "recommendations of the association" by an independent board of visitors and the most untrammelled competition for professional honors—a revolution which sought to destroy the powers of self-perpetuation and self-appointment on the part of the faculty—and to introduce a republican and just and popular element in an organization which has been denounced as an "odious oligarchy"—an element which the opponents of the senior editor were constrained finally to introduce into the new charter, (whether practically enforced or not,) thus conceding to his coadjutors, if not to himself, a moral victory, *though more politic individuals gathered the spoils.*

We would like to know Professor Wellford's opinions on the subject of an independent board *to-day*. Is he in favor of such an one as he once informed us the old university of Pennsylvania had, (and we are glad she still retains it,) or does he prefer one of mixed powers, "in which the board and the faculty sustain the relation of husband and wife?"

And now we submit, is not this position somewhat different from that of a gentleman who for a brief season occupied a position of betweenity—who tarried about the scene of conflict—is finally made umpire—then having the *inside* track, not only "comes up to time," but distances all competitors.

He has given us an apologue from Æsop. If we may be allowed to look to the same source for an illustration, we

would refer him to the lion and the bear contending over the carcass of a lesser animal, when a fox suddenly made his appearance. "Strategy! I thank thee, Jew, for that word." But when the object of his ambition is attained, we can hear of no efforts on his part to change that "system" against which he had written and spoken so much.

But if this is not sufficient to vindicate the motives of the senior in connection with the late controversy, we pledge ourselves to prove, before any impartial jury, that in the midst of the contest, a member of the college faculty did hold interviews with friends of Dr. Wilson, and did suggest, as a mode of adjustment, Dr. Wilson's resignation and re-nomination by the college faculty; *which suggestion was declined.*

We further pledge ourselves to prove that a few days after this, one of the attorneys for the faculty, when asked by a gentleman friendly to both sides, if some adjustment could not be made, replied that he feared not, as Dr. Wilson, or his friends for him, had declined the only proposition which could bring about such a result. When farther asked "What proposition?" he replied, that Dr. Wilson should resign, and allow the faculty to nominate him. This conversation was held in the presence of the senior editor, and was not trusted to memory alone.

If Professor Wellford meant to assert that the senior editor had ever sought an appointment at the hands of the new board of visitors, then we are constrained to say that the statement is unfounded in fact. He never sought either directly or indirectly to conciliate a solitary individual of them to his interests. He made no application for the place. It is true he was nominated to this board by medical men, who wished to test the sincerity of the declaration made, "that this new board had been selected without reference to the old controversy," and who had placed and sustained him in the position he occupied, on account of the principles involved. The senior never saw the nominating paper—was not even consulted about it—but has been informed that it

was signed by near one hundred physicians of the state. He never indulged any "vain expectations" in relation to it.

But we come next to that *other ulterior object*, which Professor Wellford had in view, when he perpetrated the article we are answering. Who that has read it can fail to see that he meditated the annihilation of the Stethoscope? Misrepresentation of its course and sentiments and motives, (we hope unintentional, for his mental vision is evidently obscured by hate,) denunciation, ridicule, sarcasm, are the instruments he uses.

But to his specific charges: He says the editor or editors have advocated "every measure of reform, however quixotic."

Now we point to the pages of the Stethoscope, and challenge him to find a solitary instance in which we have advocated a single measure of reform in connection with medical education, which had not previously been endorsed by the national association, or the medical society of Virginia, and which had not been strongly recommended to "practical observance" by Dr. Wellford himself, before he had any connection with a medical school. Such sweeping declarations, without evidence to sustain them, will pass for what they are worth.

But he says we are engaged in a crusade against the medical college of Virginia—we use other people's funds—aye, *the public printer's*—to the "ignoble end" of pulling down an important state institution.

Now, we defy him to point to a single instance in our editorials or communications for the past eighteen months, (the period of our connection with the Stethoscope,) in which anything has been said about the medical college of Virginia.

We have written much about the defects in our system of medical education, and of the obstacles to their remedy. But may we not speak and write on these subjects, without having his school in our mind's eye? Is everything that is written on this subject to be considered as applicable to the medical college of Virginia? Then, Professor Wellford has a fearful account to settle. But in our editorials we did not leave

room for any conjecture as to the application we desired to be made of our remarks. In our January number will be found the following distinct disclaimer, written by the present "senior editor."

Speaking of medical education, we said :

"Our remarks on these subjects have been designed against no particular institution, but all institutions which have failed to come up to the requirements of the American medical association. Our humble meed of praise has been awarded to such as have pursued a different line of conduct. Although it may not be necessary elaborately to reargue these questions, yet we shall recur to them whenever a suitable occasion offers. This journal can afford to be independent on all subjects—and while under its present management, will never pander to the vices of our educational system, for the sake of patronage and popularity."

But we proceed to the instances cited to prove that we are in a conspiracy to pull down the medical college of Virginia.

He says we have complimented, and are endeavoring to build up, northern schools.

Now, we have spoken favorably of such institutions as have lengthened their terms of study. We alluded to the long terms of the University of Michigan—of the University of Virginia—of the Winchester medical college. We complimented the University of Pennsylvania and the college of physicians and surgeons of New York, on account of their prompt acquiescence in the measures of the association, and their appeals to other institutions to aid them in the good work of putting these measures into practical operation. Is this proof of an effort on our part to pull down southern institutions for the benefit of northern? Then, what is Professor Wellford's record on the same score?

We find in the report of that same "committee on medical education," of which he was a member, *present, aiding and abetting in its preparation and presentation*, the following :

"2. So far as the committee have learned, the courses of instruction, the requirements for graduation, and the mode of

examination of candidates in our medical schools, generally remain in the same condition as at the time of the last meeting of the association. It is with pleasure, however, that they can mention several exceptions. The university of Pennsylvania and the college of physicians and surgeons of New York adopted the recommendations of this body at its last meeting, and extended their term of instruction, the former to five and a half and the latter to five months. The college of physicians and surgeons of New York also established an additional professorship. Your committee are happy to add that this prompt and cheerful acquiescence in the views of the association by two of the most venerable and respected institutions of the United States, has been approved by public opinion and sustained by public patronage."

But we cannot refrain from noticing one other of the proofs adduced by Professor Wellford, to show that the Stethoscope is endeavoring to pull down the medical college of Virginia.

During the past fall, a southern medical friend was sojourning in the city of New York. Whilst there he wrote us a letter, giving some account of medical men and things. He touched upon medical education; and after having given a well merited castigation to the disreputable tricks resorted to by some of the New York schools to procure students, he used the following language:

"The schools are too short sighted to see their own true interests and the signs of the times. All these *little* reforms, which have been attempted, and from which some have receded, do not meet the wants of students themselves. There is a sufficient number of young men desirous of acquiring a thorough knowledge of medicine, and willing to make any sacrifice of time and money to acquire it. There is a sufficient number of such students, I am sure, to support at least one school well. Which city shall have the credit of establishing it? Shall it be Boston, New York, Philadelphia or Baltimore? I wish I could add Richmond to this list; but I believe recent events have rendered all expectations of such a character utterly vain. What city of the Union shall have the honor of establishing a medical university, with a sufficiently large corps of professors (a dozen if necessary) to teach every branch thoroughly, with a course extending through nine or ten months of the year, and requiring four or five years of instruction, including a thorough course of

clinical medicine and surgery? Such a school would receive the patronage of a large number of young men, honestly desirous of acquiring a thorough medical education before undertaking the serious responsibility of having committed to them the life and health of their fellow beings. It would be sustained by the medical profession of the whole Union, and its diplomas would be eagerly sought for as a passport to the confidence of the community where its graduates might commence their career."

But Professor Wellford takes exceptions to the views of this correspondent, and adduces the publication of them as proof that the Stethoscope is endeavoring to pull down the college. And pray, will he maintain that "the college" "is such an university" as our correspondent wrote about.

But to sum up, and define our real position with regard to the medical college of Virginia. Heretofore, we have maintained silence in regard to it, and should not now have spoken of it, had not Dr. Wellford forced the necessity upon us. We again appeal to our pages. It is a little remarkable, that the only two specifications which he has given from these pages as proof that we are endeavoring to injure the college, should be a *failure*, on our part, in the one instance, to pay it a compliment, and in the other, the publication of a letter from New York, in which the writer insinuates that the medical college of Virginia is not a "university" with "twelve professors," "nine or ten months' sessions, and "requiring four or five years' instruction."

But we tell Professor Wellford, in all candor and sincerity, that if the medical college will adopt and put into practical operation the measures of reform recommended by the association, it will gain our humble support. Little as we know this will be valued—yet it will be sincere—for nobody will suspect us of interested motives. If these *reforms are instituted and enacted by law*, we should say the institution would be worthy of an ample endowment by the state.\*

\* But we are committed to these reforms. We believe them salutary, practicable and necessary.

In the first editorial we ever wrote for the Stethoscope, we spoke of the necessity of a state hospital in the city of Richmond, and that with direct reference to clinical teaching. But Professor Wellford says the Stethoscope is a "southern journal with northern principles." And pray, what can he mean by that. We are natives of Virginia and slave owners—*neither mesmerizers, nor phrenologists, nor table-turners*. "Northern principles!" Did Professor Wellford design in this expression to give impetus to the ball of political proscription against us, set in motion by his amiable coadjutor, "Powhatan." If he did, we can only exclaim "et tu Brute." "Northern principles!" Why, if we mistake not, northern gentlemen have met with considerable favor in the Richmond medical college; and Dr. Wellford himself once told us that he had been an applicant for a professorship in a northern medical college. We are then perhaps indebted to his failure in that quarter for his present glowing patriotism in behalf of southern schools.

But not only has Dr. Wellford manifested his hate to the Stethoscope by such representations as these. He might, as is usual in such cases, have demanded the name of *Æquus*, and conducted his controversy with his assailant; but this course would not answer his purpose. He deeply premeditated the utter destruction of our journal, and holds the present editors responsible for all it contained when under the charge of seven editors selected and appointed by the medical society of Virginia.

When his consistency is assailed by *Æquus*, he displays an eager greed to attack the editors. Having obtained a "*carte blanche*" to reply to *Æquus*, he uses this liberty and courtesy in making appeals, *through our own columns, and to our subscribers, and "partners in the enterprise."* He warns Messrs. Ritchie & Dunnavant against us—significantly reminds them that they are state printers!! We protest the annals of controversy do not afford such another example of professorial arrogance. Surely he must really have thought himself "the president and his cabinet."

But whence this newborn zeal of Dr. Wellford for the interest of Messrs. R. & D. He did not display it when others were endeavoring to make the journal pay the debt due them. On the contrary, we have reason to know that at that time he did what was in his power to cripple those efforts. We have never known Dr. Wellford to manifest any interest in the Stethoscope, save during the few days which elapsed between the order for its sale by the medical society of Virginia and the announcement of the arrangement by which the present editors were engaged.

The truth is, Professor Wellford had an eye on the Stethoscope himself, as we believe. Perhaps he wanted an organ, and perhaps he has come to the conclusion that such expectation is vain in this quarter. "*Hinc illæ lacrymæ.*"

But what is the ostensible cause of this extraordinary assault on the Stethoscope? We published a communication in our journal, charging that his present course of action is inconsistent with his previously expressed opinions. Is it anything unusual for such charges to be made against the officers of an important state institution?

But Professor Wellford closes his article in perfect good humor, and so do we. Indeed, he is facetious on the occasion. He says the course of this journal on the subject of medical reform has been the source of infinite amusement to his particular coterie for some months past. If amusement leads to such articles as he has sent us, and engenders such feelings as he has betrayed, then we prefer as little participation in it as is convenient. But we rather suspect that some arrow, sped at random, reached its own destination, and is rankling in the heart.

"And we, that have free souls, it touches not.

Let the galled jade wince, our withers are unwrung."

That there are those who hate us, on account of our zeal for the practical introduction of measures of reform in medical teaching, we are well assured. We may have been the subjects of their gibes, and wit, and the traduction of our

motives, but we have survived, and are "in health," and at peace with our views of duty.

We hope our journal will live, though it may not "flourish like the green bay tree." We have received expressions of thanks, voluntarily tendered, from some of the first medical men in this state, and out of it, for our course on this subject. Aye, some of them professors, too.

But Professor Wellford closes his article with an aspiration to heaven in behalf of his colleagues. However much we may differ from these gentlemen, yet as editors we have nothing to do with them. *They have forced no controversy on the Stethoscope.* They have at least been consistent. They have not lectured national associations, and state societies, and a state legislature, on the necessity of reform in medical education. They do not fear "that medicine, like the lost pleiad, will disappear from the brilliant constellation of sciences," under the present system. We commend Dr. Wellford to their skillful obstetrics and surgery.

And now we, as editors, have met the duty devolved upon us by Professor Wellford—but the senior editor desires to say one word for himself. Dr. Wellford endeavors to weaken the force of *Æquus'* criticism, by the insinuation that the senior editor had in some way prompted or suggested or procured the writing of that criticism. This suspicion is utterly unfounded in fact. He had no manner of complicity with it. Never saw it or heard of it until the day before it passed into the hands of the printer—but deeming it a fair criticism, couched in respectful language, he ordered its insertion in the *Stethoscope*.

NOTE.—The proof sheets of Dr. Wellford's article were sent to him for correction. We find that on page 388, 3rd line from bottom, after the word: "**expected** from a *scientific* journal," he struck out from the proof sheet "God save the mark." This is a small matter, but we choose for our readers to see precisely what we have attempted to answer, as well as the *animus* with which Professor Wellford wrote it.

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SELECTED ARTICLES.

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## OBSTETRICAL.

CHLOROFORM—ITS PROPERTIES AND SAFETY IN CHILD-BIRTH. *By Edward William Murphy, A. M. M. D. &c. &c.* The increase in the number of deaths, during the performance of surgical operations under the influence of chloroform, has naturally excited a good deal of anxiety in the minds of professional persons and of the public, and it has given a color at least, if not force, to the arguments and assertions of those who have throughout opposed the use of anæsthetics. The mistrust thus excited is doubtless strengthened by the fact, which cannot be denied, that we have arrived at no very satisfactory or positive conclusions as to the cause of death in such cases; whether it has been the result of the mode of administration, as Professor Syme seems to think, or from the presence of some incompatible disease, or some peculiarity of constitution which renders the system intolerant of chloroform—we cannot say, but certain it is that we are not yet in a position to say in what cases it ought to be proscribed. Nay more, it is not certain that, in several of the fatal cases, chloroform had any share in producing the unfortunate result; for many cases are on record of patients who died suddenly at the commencement of an operation, without any adequate cause, long before chloroform was discovered. In these cases it requires more than ordinary skill to guard against the old fallacy of *post hoc ergo propter hoc*. The truth is, that the whole subject requires careful revision; and the object of those who seek for the truth should be, by a careful collation and stringent analysis of facts, and especially of the unsuccessful cases, to ascertain the diseases with which chloroform is incompatible, the states of the system generally in which its administration is injurious or questionable, and to what extent its employment is without risk. If we knew these points, chloroform would rank precisely as any other remedial agent, but until then we shall be liable to a repetition of unexpected fatal accidents.

These considerations apply to its exhibition in obstetric as well as surgical operations, although as yet they have not

been forced upon our attention by similar unfortunate circumstances. Yet we cannot deny *à priori*, that there may be obstetric cases in which so powerful an agent will be injurious, and therefore it becomes our duty to guard against them by thorough investigation.

Many, however, who do not object to the employment of anæsthetics in obstetric operations, decline to use them beyond these limits, and demand why they should be employed in ordinary labor? To which the advocates of chloroform would probably reply by another question, Why should we not employ them if we find them beneficial? The investigation of these two queries will go far to exhaust the arguments *pro* and *con*, and we propose to lay the matter pretty fully, but as briefly as we can, before our readers.

In this enquiry we shall derive most valuable assistance from the little volume just published by Dr. Murphy, which we have placed at the head of this article. Its tone is so calm and moderate, its facts so clear, its directions as to the mode and extent in which chloroform should be exhibited are so precise, that we think it will quiet the fears which recent occurrences have excited as to the danger to be anticipated from its employment in midwifery, as well as afford adequate guidance to those who are willing to use it, provided they incur no danger by so doing.

“Why should you employ anæsthetics in ordinary labor not requiring an operation?” say the opponents, “since by so doing—1, You interfere with a *natural* process; 2, You contravene a special arrangement of Providence; 3, You induce a state of drunkenness, or something equivalent to it; 4, You may suspend uterine action, so as, 5, to involve the necessity of an operation; 6, You may occasion hæmorrhage after delivery, or convulsions or insanity; or 7, You may cause death.”

These are all the objections we remember to have seen against the employment of chloroform in midwifery, and we have endeavored to state them fully and fairly. Let us now calmly enquire into their validity, merely premising that they assume the exhibition of chloroform in full doses—in other words, the production of complete anæsthesia.

1. It is undoubtedly true, that in giving chloroform in labor we interfere with the natural process, so far as pain is concerned; but so we do when we give laudanum in a painful disease, for pain is as much the natural accompaniment of certain diseases as of labor, although, of course, labor is not a disease. But this argument comes with a very bad grace from those who would not scruple to induce premature labor,

which is a much more positive and decided interference with a natural and healthy process.

2. That the excess of pain, agony, and struggle of labor is the providential punishment of sin, we do not question; but so is labor ("in the sweat of thy brow," &c.) and sickness and death; and if it be wrong to take measures for the relief of the one *because* it was part of a Divine sentence, so, surely, it must be equally wrong to alleviate or postpone the other; yet we do not find that those who conscientiously oppose the former have any scruples about the latter. Exactly the same objection was made to vaccination, to steamboats, and even (in the conscientious tenderness of Mause Headrigg) to winnowing machines. We trust, however, that the very able answers to such objections which have appeared, aided by a little common sense, have had the effect intended, as we have not heard much of late on this subject.

3. A very influential writer on obstetrics, Dr. Ramsbotham, observes, that "those who come forward as the chief advocates for anæsthetics under labor, have entirely denied, or maintained an undisturbed silence respecting its intoxicating properties;" and again:

"But if the case were put fairly and honorably before them (the candidates for chloroform)—if they were informed that they might probably be made *dead drunk*, but most certainly be reduced to that state which the law designates 'drunk and incapable,' how many, it may be asked, of our high-born dames, how many women possessing common feeling, how many, indeed, removed above the very lowest orders of society, would be found to avail themselves of the immunity of suffering which anæsthetics hold out, at such a price, at such a sacrifice of moral obligation?"

Very few, we are sure, unless they believed, as we do, that there is not an atom of foundation for Dr. Ramsbotham's statement; and on this subject we confidently appeal to the numerous surgeons and accoucheurs who have witnessed its effects. In answer to Dr. Ramsbotham's assertion "that this state is not sleep, but drunkenness," Dr. Murphy replies:

"I must be equally emphatic, and repeat that the anæsthesia of chloroform has not the least resemblance to drunkenness; they have not a symptom in common. Alcohol mixes intimately with the blood; chloroform does not. The one is highly stimulating; the other is not at all so. Alcohol has no anæsthetic power, unless taken in very large quantities, when the imbibor, after a stage of most boisterous excitement, arrives at the condition termed '*dead drunk*,'—the anæsthesia of alcohol. Chloroform manifests this power without the least

excitement; it produces anæsthesia, and takes away pain, *without disturbing the intellect in the least degree.* The patient is perfectly herself, and in the words of Dr. Ramsbotham, can 'expatiate on the relief afforded her.' If chloroform cause sopor, the sleep is perfectly tranquil, the only evidence of excitement (if such should happen) being the occasional mutterings or ramblings in the transition from wakefulness to sleep. The effects of alcoholic potations do not pass away for hours afterwards, because time is required to separate it from the blood. Chloroform is not so dissolved, and therefore rapidly evaporates, leaving the patient, in much less than an hour, as much herself as before she inhaled the vapor." P. 64.

In fact, whether we note the effect of small or of full doses, whether we observe the initiatory stage, the full effect, or the recovery, the difference from drunkenness is most remarkable, the scientific resemblance nothing; the subjects are no more legally 'drunk and incapable,' than they are 'drunk and disorderly.' That the subjects of a full dose of chloroform or alcohol are insensible, is true; but we might as well assume that traveling by railroad is the same as traveling by coach, because the destination attained by each is the same.

4. In a certain small proportion of cases, chloroform does interfere with uterine action, rendering the pains less powerful and perhaps less frequent. In Dr. Denham's report of 56 cases in which chloroform was used, in the Rotunda lying-in hospital, of which 15 were natural labors, he mentions that in 4 it suspended more or less the natural action of the uterus, which *returned in full force when the chloroform was withdrawn.* This, we think, is a larger proportion than is generally observed, but it does not matter, for common sense tells us that in such cases we must cease giving chloroform, just as we give up the use of calomel if it cause diarrhœa; it could be no argument against the general use of chloroform, unless this effect were equally general and permanent.

Dr. Murphy thus states his experience:

"The action of the uterus under chloroform is not generally interrupted. The uterine contractions are governed by the reflex or excito-motor and the ganglionic nervous systems. The latter is never influenced, and will always maintain them. The former requires the full dose to disturb its power; a moderate dose (that which I have recommended) has no effect at all on the reflex nerves; nay, it may rather irritate than control their power. The uterine contractions are sometimes increased under the influence of chloroform, and labor makes a rapid progress. It is true this may arise from the removal of the great disturber of uterine action, mental anxiety and dread

of pain; but it may also be explained by excitation of the excito-motor nerves, rousing up the uterus to increased action. If, however, the action of the uterus be suspended because these nerves are getting under the influence of chloroform, the effect is only temporary, because the ganglionic system restores the contractions; while the very fact that the reflex system is thus affected, renders the passages much more yielding and dilatable than before." P. 37.

5. But this suspension of uterine action, it is said, may not only be complete, but permanent; and Dr. Robert Lee has related five cases in which it became necessary to deliver with the forceps, in consequence of the cessation of pains, and in which chloroform had been given, although we are not told to what extent, in each case. Now, it will be recollected that in the cases we have quoted from Dr. Denham, the pains immediately returned on the omission of the chloroform; this is the experience, too, of Drs. Simpson, Beatty, Murphy and M'Clintock, and certainly our own. We have never seen any exception to this rule, but we *have* seen cases of powerless labor without chloroform, in which the pains gradually ceased, and the forceps became necessary, and so, we doubt not, has Dr. Lee. To establish his point, he should give us presumptive proof that the cases would have terminated naturally but for chloroform, or some evidence more special of the direct evil effects of the vapor. Upon the data before us we must confess that we must decline agreeing with his conclusions, although we cannot but say that if the practitioners who had charge of the cases thought that the chloroform diminished the pains, they acted very injudiciously in not instantly suspending it.

Dr. Lee relates two other cases in which craniotomy was necessary, as he considers, in consequence of the suspension of the pains by chloroform. In case 1, where insensibility was not produced, it does not appear that the pains *were* suspended; in the other they were, but whether by chloroform or not is not clear. Dr. Beatty's remarks upon these cases are so apposite, that we shall take the liberty of quoting them:

"We all know that uterine contractions are often suspended naturally for hours in the middle of a labor, when no chloroform has been used, but that alone would never lead one to resort to craniotomy; there must be something else in the case besides mere want of action in the uterus to warrant such a proceeding; and so it must have been in these cases cited by Dr. Lee. Very likely the uterine action was interfered with by a precipitate employment of the drug; but it is also likely that the cases were such as would have required

craniotomy equally if chloroform had never been used; for I cannot for a moment imagine that a physician of Dr. Lee's experience would resort to such an operation on the simple grounds of an arrest of uterine action. In the absence of details of these cases, we may safely put them down as *post hoc ergo propter hoc* cases, and class them among the absurd exaggerations (to use no more severe term) with which partisans so often attempt to mislead their readers."

Let us also just remark, that the arrest of pains took place during the first stage, a time when their spontaneous diminution in pregnancy is not uncommon and is of no consequence, if other circumstances are favorable; and during which stage, in the absence of complications, an operation is rarely, if ever, justifiable.

6. Dr. Lee relates seven cases in which "insanity and great disturbance of the functions of the brain followed its use;" or, in obstetric language, some degree of puerperal mania occurred; and if this never happened except when chloroform had been used, they would exactly prove the point, but as all the best writers on obstetrics, before and since chloroform, have described such an affection of childbed, and as all of us are unfortunately familiar with it in practice, it is difficult to see how such a case as the following proves anything but that puerperal mania may occur after chloroform, as well as without it. "Case 10. In the month of June last, chloroform was cautiously administered to a lady in her first confinement, twelve hours after its commencement. The pains were soon wholly suspended, and it became necessary to deliver with the forceps. Eight days after, violent cerebral disturbance ensued, and she has continued, till a very recent period, insane." Now, considering that in this case there are two very serious deviations from the all but universal action of chloroform, we think that it rests with Dr. Lee to prove that the necessity of the forceps and the occurrence of insanity were due to chloroform; might we not as well attribute the insanity to Dr. Lee's use of the forceps, and on exactly the same process of reasoning?

"I have administered," says Dr. Murphy, "chloroform in upwards of a hundred instances, a number sufficiently large to form an accurate opinion on such a point. I can truly say that in not a single case was there the slightest approach to mental aberration. Could this happen if insanity were one of its effects?" And again, "I have not as yet met with an instance of mania *after* the administration of chloroform, although it is quite possible I may do so, when the usual causes of this disease come into operation to produce it. I once at-

tended a lady (the wife of a medical friend) to whom had I given chloroform I should have been very much<sup>1</sup>blamed. She suffered rather severely. I proposed the inhalation of this vapor; my friend however objected, as he feared, from some peculiarity in her constitution, that it would not agree with her. She went through her labor, and after a severe trial was safely delivered. On the tenth day symptoms of mental aberration manifested themselves, which continued some time before they disappeared." P. 67.

The experience of most of those who have used anæsthetics, Drs. Simpson, Channing, Beatty, Denham, &c., quite supports Dr. Murphy's statement, and would almost, if not quite, justify the conclusion that puerperal mania is rather less common when chloroform is used. Although a single fact is not of much value, we may mention that in a case under our own care, in which mania and insomnia occurred without chloroform, the only rest or relief the patient obtained was after the full exhibition of the vapor.

Again, we are told by the same author that "dangerous or fatal peritonitis or phlebitis ensued after the exhibition of chloroform in cases 7, 8, 11 and 13." But here there is the same absence of any attempt to show the connection between the chloroform and its supposed consequence. Take, for example, the following case:

"CASE XI.—About the same time, chloroform was exhibited to another patient, a lady in her first labor. The contractile powers of the uterus were soon wholly suspended, and the delivery was completed by the forceps. Fatal peritonitis, with peculiar nervous symptoms, soon supervened."

Now, unless we are prepared to take Dr. Lee's word for it, we do not see on what ground we are to attribute the peritonitis to the chloroform; if on the doctrine of sequences, then the operation with the forceps comes after the chloroform, and has consequently a clearer right to be considered its cause.

It is proverbially difficult to prove a negative, and therefore, without denying the *possibility* of grave accidents from chloroform given in labor, we shall be quite contented if our readers are satisfied, from the foregoing considerations, that these facts upon which Dr. Lee founds his opinions are "not proven" to be liable to the interpretation put upon them.

But with regard to another effect attributed by him to chloroform, we have more positive evidence in answer. Case 14 is given as one of epilepsy or convulsions caused by chloroform; and we remember the time when it was thought that in certain cases chloroform might produce such an effect, but

the result of further experience has been the discovery that, in many cases, the inhalation of chloroform or ether is one of the most powerful means we possess for controlling and curing convulsions. For example, Dr. Channing, of Boston, U. S., gave ether in 10 cases; in 6, the patients recovered; Mr. Turner, Mr. Norris, and Dr. Keith, each gave it in a case with perfect success, and an equally favorable example occurred at Gosport. Mr. Bolton tried it successfully after bleeding and opium had failed. Dr. Shekleton, the late master of the Dublin lying-in hospital, administered it in 9 cases; in 5 the convulsions were completely arrested, and in 4 they were lessened in intensity and frequency. We have ourselves given it in convulsions during gestation, with immediate benefit. Many more similar cases might be adduced, but these are surely enough to oppose to the single case related by Dr. Lee, and more than sufficient to exonerate the chloroform from having caused the convulsion, unless we admit (on the principal of *similia similibus curantur*) that it may be at once the cause and cure of the disease.

Lastly, a fear was expressed by some practitioners that, as chloroform sometimes interferes with uterine action, it might give rise to hæmorrhage by arresting contraction after delivery; but such has not been found to be the case. We are not aware that any instance of the kind is on record, and we have the testimony of Dr. Simpson and others that it has been safely administered in cases of placenta prævia and other forms of alarming hæmorrhage.

7. We do not know of any case of labor, supposed to have terminated fatally from chloroform, related on good authority, except the one given by Dr. Ramsbotham, the substance of which we shall quote, together with Dr. Murphy's comments, with which we entirely agree.

"It was the lady's fourth child; she gave birth to the first, after a very tedious and painful labor, in consequence of a considerable narrowing in the conjugate diameter of the pelvic cavity, which rendered the use of the long forceps necessary. This was before the application of anæsthetic agents to the practice of obstetrics was adopted in England. Her medical attendant (not Dr. R.) at her urgent request placed her under the influence of chloroform during her second labor, and her recovery was speedy and perfect."

It was exhibited in her third confinement, but inefficiently, and in her fourth labor.

"Parturient pains came on about noon. Chloroform was given at 7½ P. M. when the os uteri had acquired the diameter of an orange, and the pains had become frequent and

strong. Its effects were most delightful and tranquilizing. After refreshing sleep, she rose and bore some moderately strong pains without a return to chloroform. It was then resumed, and repeated in frequent drachm and half-drachm doses, but only when she entreated to have some of the delightful chloroform, from about ten to a quarter to twelve, soon after which the child was born. She instantly expressed much gratitude, and expatiated on the relief afforded, though even then she felt 'wring' by the severity of her labor. The uterus contracted well, and the patient appeared comfortable. At the end of an hour and a half, however, distressing dyspnoea came on; this was soon followed by convulsions and almost immediate death."

"Such," observes Dr. Murphy, "is the account of this deplorable death from chloroform. Let it be compared with those which have occurred in surgical practice, and a judgment formed of the accuracy of this conclusion. The lady referred to never lost her consciousness. Chloroform never caused her the slightest inconvenience during its inhalation, her respiration was perfectly undisturbed. After delivery she '*instantly expatiated on the relief afforded her, was quite collected, quite comfortable.*' But in an hour and a half afterwards, when all the chloroform inhaled (and she had evidently taken very little) had quite time to evaporate and disappear, she is seized with a distressing dyspnoea! an effect the very contrary to what chloroform is known to produce; *convulsions* and death follow. We would ask, how could the absent vapor cause a distressing dyspnoea, when its presence did not disturb the respiration in the least degree? If chloroform cause distressing dyspnoea, why not do so during its inhalation? or if such be its effect *after* inhalation, how is it that we cannot find a single instance of death so produced in the thousands who have been under its influence for surgical operations? A moment's reflection is sufficient to show the injustice of attributing this fatality to chloroform, simply because no other explanation can be given." P. 61.

To us this case resembles those cases of idiopathic asphyxia which occur sometimes after delivery, and of which we had intended to quote one or two as illustrations, had not this notice already occupied so much space.

In addition to the foregoing serious objections to the use of chloroform, a minor class has sometimes been adduced, consisting of certain symptoms which occasionally follow its employment. For example, headache, vomiting and temporary incoherence, do occasionally but rarely occur: the former speedily pass away, and the latter is removed by a

little less or more of the vapor; we have never observed that the language was either violent or coarse; in most cases it was unintelligible, from the patient uttering only parts of words. As to erotic ideas, said to be excited by chloroform, it is difficult to speak positively; at any rate, it cannot be a common effect, as few with whom we have spoken have witnessed it.

We have thus endeavored to lay before our readers all the objections brought against the use of chloroform in midwifery, and we have endeavored to do so fairly, neither extenuating nor undervaluing the arguments of its opponents, nor denying the possibility of accidents. But we must here remark a very important point: all, or almost all, the objections are directed against the use of chloroform in full doses—i. e. given so as to produce insensibility or sleep; and although we think the facts adduced fail to establish the case even against its full exhibition, we have ourselves an objection to carrying it to this extent in ordinary labor, for this very obvious reason—that it is quite unnecessary. Quite sufficient relief may be afforded without interfering with the mental condition of the patient—such relief as will enable her to bear her labor firmly and patiently, and secure her from all the evil consequences of prolonged pain. This, we say, may be done without placing the patient within the *possibility* of danger; and to this, therefore, none of the objections hitherto made apply. Dr. Murphy's testimony is conclusive upon this point:

"The obvious conclusion," he remarks, "from these experiments is, that the risk from chloroform may be altogether avoided, and yet the patient receive a considerable amount of relief. In the practice of midwifery, the pains of labor can be assuaged and rendered tolerable without inducing sleep; and in the practice of surgery, it appears to me that many minor operations may be performed with equal safety." P. 52.

On the other side of the question, the advocates of chloroform contend for its exhibition, because—1. You relieve suffering by it; 2. You diminish the nervous irritation produced by long continued pain; 3. You lessen, or avoid altogether, the shock to the nervous system, and so far the object may be obtained without producing sleep or unconsciousness; 4. In case of an operation, the patient is not merely saved from suffering, but placed in a more favorable condition for its skillful performance, in as much as the operator has not to guard against her struggles and resistance where chloroform is fully administered.

1. That pain is an evil can hardly be denied, but that a

certain amount of it can be borne with perfect impunity is equally true : we daily witness labors terminated within a few hours without any perceptible effects on the constitution, or any retardation of the recovery. In such cases, we are far from thinking chloroform necessary, but if the patient request to be spared a portion of this amount, and we believe that we can do so with perfect safety, why should we refuse? Our own practice has been, never to propose chloroform unless we saw that the amount of suffering was likely to do mischief, or in cases where an operation has been necessary ; but we have not felt at liberty to refuse it even in less severe cases, when demanded, and we believed that its administration was safe.

2. But in many cases the suffering is very severe, either from the exquisite sensibility of the patient, or from the greater resistance ; and, no doubt, the recovery may be retarded by it. From this injury we possess the means of saving our patient, in the moderate exhibition of chloroform.

"The advantages of chloroform in obstetric practice consist not only in its power of controlling the intensity of suffering to which the parturient woman is too often unnecessarily exposed, but in promoting a more favorable recovery. Since the publication of Mr. Travers' work 'On Constitutional Irritation,' the profession acknowledge the danger that sometimes results from intense pain. Patients have died from the shock of an operation. It is denied, however that the pains of labor, be they ever so intense, produce any shock to the constitution : I believe this to be utterly untrue. I know nothing that predisposes more to troublesome consequences than long continued and severe pain, especially with delicate women. Their recovery is always slow ; and while in this depressed state, if a morbid poison be within reach, they are sure to absorb it." P. 44.

3. But the shock to the nervous system may not only retard the patient's recovery, but may implicate her in immediate peril. We have more than once witnessed cases of labor terminated by the natural powers, and yet which left the patient in such a state from the "nervous shock," that it was doubtful for some time whether she would ever rally ; and in one such case, death took place apparently from no other cause. Again, in cases not so severe, but in which an operation may be necessary, this addition to the shock may leave the patient with a very doubtful chance of recovery. From these dangers we may, in most cases, preserve our patient by a timely and moderate exhibition of chloroform, without incurring any risk of injury.

4. Lastly. The situation of a patient upon whom an obstetric operation has to be performed is very different from that of a surgical patient, and renders the benefit of chloroform still more striking. The latter has a choice offered him, and if he submit to the operation he does so willingly, and with an effort at least to bear it bravely. Besides, there are always assistants at hand who will exercise both control and even a little coercion, if necessary, after the operation has been commenced. On the contrary, an obstetric operation is a comparatively sudden necessity, without a choice whether the patient will submit or not. She *must* consent to its performance to save her own life, or her child's, or both, and this urgency, together with the effect of her previous sufferings, seems to diminish her power of self-control. Then, if during the operation she resist or struggle, there is no power of restraining her, nor would it be easy, or perhaps safe, to do so, even if there were plenty of assistants at hand. Yet, notwithstanding the outcries and struggles of the patient, an important operation, internal, involving organs essential to life, and easily injured, in the neighborhood of some of the great viscera of the body, has to be performed coolly, discriminately, and deliberately, under most trying circumstances of fatigue of body and mind, and possibly with many other disadvantages. How difficult this is, even in favorable circumstances, all obstetricians know full well, and those in contact with the poor know how almost impossible it occasionally is. But under the effects of a full dose of chloroform all this distress is spared; the patient, unconscious of suffering, lies sleeping calmly, perhaps smiling, while the operator, relieved in mind and body by the absence of cries and struggles, is at liberty to concentrate his entire efforts to the successful completion of the formidable operation he has undertaken; and when all is finished, and the effect of the chloroform dissipates, he finds his patient awake, calm, easy, and grateful for the relief he has afforded and the suffering she has been spared. That this is no exaggerated statement will be testified by every one who has fairly tried the experiment.

Until we have better evidence than has hitherto been adduced, that the full use of chloroform in such cases is attended with danger, we confess that we should feel ourselves blameworthy if we refused to employ it. Judiciously given, it is a most valuable addition to our means for rendering an operation successful, both by relieving the patient's suffering and rendering her a better subject for the skill of the operator. To those who think that they derive any benefit or guidance from the outcry of the patient, we hardly know what to say without giving offence. The true guide for an operator ought

to be his perfect knowledge of the organs upon or among which he is going to operate; and if this be insufficient, without the addition of warning from the cry of his patient, it would perhaps be better that he should not operate at all.

We have occupied so much space in these investigations, that we shall only lay before our readers Dr. Murphy's rules for the administration of chloroform, premising that we ourselves prefer a white pocket handkerchief, folded in a conical shape, to any inhaler we have hitherto tried, and that we think the dose rather to be measured by the sensibility of the patient, and the effects produced, than by minims or drachms.

"Rule 1. Let the chloroform be pure. If rubbed on the hands, the smell should be fragrant, not pungent, like sulphuric ether. If inspired from the inhaler, there is a sense of warmth in the mouth, a fruity flavor, no pungency; if the strength of the vapor be sufficient, it will excite a slight cough; but if impure, the cough is irritating. Let the sponge of the inhaler be placed in warm water, and then wrung perfectly dry. About thirty minims may be poured upon it, which is sufficient in the first instance.

"2. When labor has commenced, do not interfere so long as the patient bears her pains well; if she be not teased with short, very severe, and inefficient pains, chloroform need not be given. If, on the contrary, the severity of the first stage be such, the anguish of the patient so great, that pain is evidently a cause of protraction, chloroform may be given with great benefit.

"3. Always commence with a small dose, about thirty minims; if it agree with the patient, no inconvenience is caused, but she will generally complain that it is doing no good; the quantity may then be increased, until on inhalation the exhibitor finds that she cannot take a full inspiration without cough.

"4. In the second stage of labor, chloroform may be given when the head is approaching the perineum, or before then if the pains become intolerable. This may be known not merely by their greater intensity while the uterus is in action, but also by the restlessness of the patient in the intervals. She is watchful, dispirited, still crying, but in a more subdued tone, from pain and a feeling of soreness.

"5. When the head arrives at the perineum, chloroform may be given in a fuller dose, if it have not already accumulated. The perineum yields more easily under its influence, and the severity of the pains is controlled without any loss of force. This rule applies especially to cases in which powerful forcing pains are acting against the perineum at the hazard of its laceration.

"6. When operations are necessary, if they are not severe; as, for instance, some forceps operations—chloroform may be given in the same manner as in natural labor, but always after the instrument is applied.

"If severe it may be given as in surgical operations, but not to the same extent. Hence an assistant is necessary who is conversant with the properties of this anæsthetic. It is obvious that the same person cannot operate and give simultaneously the full soporific dose of this agent.

"7. The inhaler should be applied to the mouth just before the pain commences, two or three full inspirations taken, and the moment the action of the uterus ceases it should be withdrawn. The inhaler should never be applied in the interval between the pains, and if used in the middle of a pain the cries of the patient blow away the vapour, and no relief is given.

"8. When inhalation has been continued in this interrupted manner for some time, if any alteration be observed in the countenance or manner of the patient—if the face is flushed, or bloated, or tinged with a slight lividity—if she ramble or become hysterical, let the inhaler be withdrawn, and the face of the patient fanned. Wait until the pains return to their original severity before renewing the inhalation, when it is probable that these symptoms will not return.

"9. In some instances, the patient is very intolerant of her pains, and if given chloroform to relieve them, she becomes hysterical, crying, perhaps louder than before it was inhaled. In these cases it is better to induce sopor, which may easily be done, without stertor. For this purpose, a sponge and folded handkerchief applied to the nostrils is preferable to the inhaler. Whenever sopor is brought on, the closest attention should be given to the countenance—observe the irritability of the eyelids; to the respiration—notice its frequency, and especially stertor; to the pulse—mark its strength. The handkerchief should always be held at a distance at first, and be gradually brought nearer, but the sponge should never be applied quite close to the nostrils.

"10. There should be the freest circulation of air in the apartment; and if, after delivery, there should be any feeling of faintness or nausea, ammonia in effervescence will relieve it." P. 69.

We strongly recommend Dr. Murphy's little work to the profession, which we think owes him obligation for having brought clearly before it the advantages of chloroform in small doses for the relief of the suffering of labor.

FLEETWOOD CHURCHILL.

*Br. & For. Medico-Chir. Rev.*

## CHEMICAL.

FLANDIN'S NEW PROCESS FOR THE DETECTION OF ORGANIC POISONS.—It is an acknowledged fact in medical jurisprudence, that the presence of an organic poison cannot be demonstrated unless the vegetable alkaloid used can be exhibited in a pure state. The following process, published at Paris in 1853 by Charles Flandin, long the rival of Orfila, appears to accomplish this desideratum; and as his work on Poisons is somewhat rare in this country, it has seemed proper to give the method a somewhat wider circulation than it at present enjoys.

"In experimenting on suspected animal matters," says our author, "I have considered that they are composed of proteine or albuminous compounds, easily coagulated by heat, of neutral coloring matter, which is modified in contact with alkaline earths, such as caustic lime and baryta, and of greasy or resinous substances held in emulsion by albumen or by alkaline salts.

"The temperature of boiling water renders albuminous compounds insoluble. The treatment with caustic lime or baryta decomposes the coloring matter, and converts the resinous and fatty substances into insoluble soaps. The vegetable alkaloids are not changed by this process, and after the whole mass has been thoroughly dried and powdered, are dissolved out by alcohol and treated with ether, acetic acid and other appropriate solvents, according to the nature of the alkaloid suspected.

"If, however, a volatile alkaloid is present, a simple distillation, either in the air or in an atmosphere of some other gas, as nitrogen, or in vacuo, will suffice to separate it."

The process for eliminating morphine will serve as a model of Flandin's method.

"The suspected matter must be evaporated to dryness in a water bath, in contact with pure caustic lime, in the proportion of about twelve parts of lime to one hundred of organic substance. The whole mass must then be pulverized, and again thoroughly dried in the water bath. After this, it must be boiled with absolute alcohol, and the liquor decanted upon a filter. This process is to be repeated two or three times to extract all soluble substances. On cooling, a portion of fatty matter separates from the alcoholic solution, and is removed by a second filtration. The alcohol is then evaporated, and the dry residue treated with ether to remove the remaining fatty matter, leaving the morphine undissolved, either pure or

combined with the other alkaloids which are associated with it in opium. In the first case, the usual tests will demonstrate its presence. In the second it must be treated with acetic acid and dried at a gentle heat. The residue is next treated with a little water, which dissolves the salt of morphine, from which the pure alkaloid is precipitated by the addition of ammonia. It may now be collected upon a small filter, and submitted to the usual tests, or be dissolved again in alkaloid and allowed to crystalize by spontaneous evaporation."

This method, with slight modifications, may be applied to the detection of all the fixed alkaloids. Some, as narcotine, porphyroxine and meconine, are soluble in the ether employed in the process, and are to be sought for in it. Others, as hyoscyamine, may be found in the acetic solution after ammonia has failed to throw down a precipitate.

The most favorable results have been obtained by this process. From 1500 grains of blood, to which had been added a single grain of morphine, Flandin clearly exhibited a considerable quantity, and he was able to detect it even in the proportion of one ten thousandth, say one grain of morphine to a pound and a half of animal matter.

One of the undersigned (J. G.) obtained by this process, from fifteen hundred grains of muscular fibre to which a grain and a half of strychnine had been added, and which had been set aside in a warm place until putrefaction had thoroughly set in, about half the original quantity of the pure alkaloid, in which its crystalline form could be observed, and from which the characteristic reactions were obtained.

The simplicity and certainty of this process must recommend it to every chemist, and the quickness with which it may be performed (thirty-six hours being in most cases sufficient) renders it doubly valuable for the purposes of justice.

T. W. CLARKE,  
JOHN GREEN.

*Cambridge, June 13th, 1855.*

*Boston Med. and Surg. Journal.*

## PRACTICAL MEDICINE.

ON THE NATURE AND TREATMENT OF CHOLERA. *By Henry Hartshorne, M. D.*—There is reason to believe, with Favel, that the cholera attack may be in general resolved into three grades or stages :

1st. That in which the morbid (unknown, but supposed material) cause has reached only the alimentary canal, or the ganglionic centres which control its movements and secretions; giving rise to the premonitory symptoms, or those of *cholérine*.

2d. That in which the "poison" affects all the ganglionic centres (miscalled those of the sympathetic nerve,) and all the muscles of organic life, as well as some of the voluntary muscles; including in the former category the muscular coat of the stomach and intestines, the heart, bladder, smooth muscular fibres of the bronchial ramules, and the muscular coat of all the arteries and some of the veins; producing what Prof. Meigs has most graphically called the *cholera squeeze*, or universal tonic spasm of the organic muscular tissue; the pressure of which upon the blood produces an arrest of circulation, and an actual expression or forcible filtration of serum through the coats of the vessels, (and thence out by the mucous membranes,) just as urine is filtered from the *corpora malpighiana* into the uriniferous tubules of the kidney—all those morbid appearances after death, which some have called inflammation, being, in truth, merely venous congestion, and the effects of what may be properly called vascular spasm. It may be noticed, also, that the abundance of *free epithelial cells* in the intestines, after death, upon which so much stress was laid by Prof. Horner and by Böhm, has been proved by Drs. Parkes, Gull, Lindsay, &c. to be the result of maceration and not pathological.

The pathology of the 3d stage consists in the confirmed poisoning of the *blood*, putting it, in many instances, beyond the power of recovery, so that patients often die after reaction from the collapse, with symptoms analogous to those of low fever. Examples of this occur everywhere, during the prevalence of a malignant epidemic—as in the Philadelphia alms-house in 1849, and at Columbia in 1854.

Indications for a rational treatment may, it appears to the writer, be deduced from such a pathology.

In the first stage, mild anodynes and diffusible stimulants, (perhaps, even, certain astringents,) are very often sufficient to relieve and check the attack.

Some cases, however, pass directly, without any premonitory diarrhœa, into the collapse. In anticipation of this, when

threatening to occur, camphor, opium, chloroform, ammonia, creosote, and the essential oils, have been, as I believe, found to be the best of remedies.

In the second stage, Duchussoy and Vernois have proved the absolute *nonabsorption* of medicines. Stomachic stimulants and anodynes, to act locally, and *ice*, to relieve the agonizing thirst, are all that it is worth while to give. In the early, or merely impending collapse, the external application of heat, as by the hot bath, &c. may do great good; later, it annoys and distresses without advantage, as Legroux and others have shown. I have seen this myself. Mustard cataplasms, according to general report, do more positive good; and so do frictions with red pepper and spirits. linimentum cantharidis, &c. perseveringly employed. The galvanic battery would seem to be a rational means of exciting reaction; it has occasionally succeeded, but not often. Venous injection has frequently been able to reanimate the patient for a period, and in a number of cases, has effected final restoration. This must be the *only mode*, unless by inhalation, in which we can affect the system generally in the collapse of cholera. Dr. Little, in 1832 and 1849, introduced small quantities of alcohol in this manner, with perfect success in several instances. Messrs. Duchaussoy and Vernois found the pupils to be dilated after injecting belladonna into the cephalic vein, when the largest doses by the stomach had no effect. I would suggest that belladonna and stramonium are remedies which ought to do good in cholera—as they, more than any other substances, induce relaxation of contracted organic muscular fibres. They should be tried by inhalation, as has been done in asthma; and I venture to propose, also, what I believe has never been thought of—*warm baths of the infusion of stramonium leaves*, in the incipency of the collapse. Anodyne baths are now frequently used for other purposes. Great success is reported, in a recent journal, to have attended the employment of hot *hop* baths in tetanus.

It is proper to try all imaginable remedies in a disease so desperate as cholera, with whose therapeia we are, at last, so imperfectly acquainted.

Belladonna, or atropia, might be injected, with a saline solution, into the bronchial or saphena vein; and quinine might be employed in a similar mode. It must be remembered, however, that, even used in this way, medicines do not have their ordinary effect in proportion to the dose, on account of the morbid state of the nervous centres. Thus, Magendie found that two grains of camphor, diffused in water and injected into the veins of a cat, will make the animal bound several feet; but, in a case of collapse, when 3ss of

camphor was similarly injected, not the smallest excitement was produced.

In regard to *calomel*, there is no indication for its use to be drawn from the morbid anatomy, or from the inferred pathology of the disease. The argument in its favor, from the absence of bile in the stools, is rebutted by the fact of its abundance in the gall-bladder; and the clinical experience so commonly quoted on its behalf, is to be accounted for by the universal addition to it of opium in the prescription. In fact, however, the amount of success claimed for it is not very great, even with this adjunct. Such is the opinion of Dr. Gull, based upon the materials collected in his well known and elaborate report.

I have but to remark, farther, upon the *rate of progress* of the disease. Phthisis may be a complaint of years; whooping-cough, of years; typhus, of weeks; pneumonia, of days; but cholera must be numbered by its hours, half hours, or even *minutes*.

The rate of treatment, then, must be in proportion. We should give medicine, if we give it at all, in small quantities, every five or ten minutes; and especial perseverance must be maintained in the use of external applications, until the patient has fairly commenced to improve. When the blood begins to run through the veins of the hand so fast that the eye cannot follow it, after having been, as it often is, nearly at rest, he is mostly safe.

As to the third stage, or consecutive fever, of cholera, it is, perhaps, sufficient to say, that the treatment ought to be mild, palliative, expectant, and carefully supporting. Too little done here is better than too much.

If nothing new is added in the above short resumé of the treatment of cholera, my purpose is answered if the opinion be clearly conveyed, that a careful survey of the best recorded experience warrants the elimination of much that has been relied upon, especially in regard to the hepatic and constitutional medication of the collapsed stage.—*Med. Examiner*.

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## PROGRESS OF MEDICAL SCIENCE.

### PRACTICAL MEDICINE.

*Tannin in albuminaria*.—M. Van Holsbeck, of Brussels, has used tannin, in large doses, in the treatment of one case of this disease, and with marked success; the dose of the remedy was gradually increased, until the quantity taken per day amounted to  $\text{3i}$ , the treatment was continued about a month.

M. Van Holsbeck was induced to use it on account of its well known hemostatic action and its property of decreasing the force of the contractions of the heart; from these facts he was led to believe that the passage of the albumen of the blood through the kidneys might be prevented by it. The results in this case go to prove the correctness of his hypothesis.

M. Le Coeur, professor at Caen, recommends friction with strong vinegar in itch. He reports ten cases of cure—no failures.

The vinegar is applied, three times daily, by means of a sponge; friction being sufficiently strong to rupture the vesicles. The average duration of the treatment was five days.

Mr. Le Coeur also recommends vinegar as a preventive and cure for the bites of those very annoying insects, known to us as the *red bug*.

*Old and new remedies in medicine.*—By W. A. Gillespie, M. D. of Louisa, Va.—In the course of my medical reading, I have observed that many new discoveries in medicine, of the present day, were known to others many years ago. There was once a controversy in your journal about which of the disputants originated the quinine practice in rheumatism. I do not just now remember the names of the parties, but one of them, I think, resided in Georgia. Now it is well known that Dr. George Fordyce used and recommended Peruvian bark in rheumatism with success. Bark or quinine has long been a popular remedy in neuralgia, and in Dr. Fordyce's day there was little distinction made between rheumatism and neuralgia. Nearly all cases were then called rheumatism. The fault now is on the other extreme, many cases of pure rheumatism being called neuralgia.

The new discoveries of percussion, auscultation and lithotripsy were known among the ancients in the infancy of medical science. I once made, as I thought, a discovery in removing foreign bodies from the ear, by a stream of warm water strongly injected into it, after the use of instruments had failed in several cases. But in my subsequent reading I found that the same practice had been recommended before. I once thought that I had a new idea for the cure of hydrophobia, assuming that death is produced by spasm of the glottis, and that tracheotomy would afford relief; but in subsequent reading I found that Mayo had recommended the same practice. I have read of no case in which it was tried, but if ever I should be so unfortunate as to meet with a case of that awful distemper, I think I will try it.

Another discovery of mine has been anticipated by your correspondent "Michigan." I have long been of opinion, and have freely advanced it, that the use of alcoholic drinks prevents consumption. In a practice of twenty-five years, I have not seen a case of consumption in what is called a drinking man, nor have I heard of one. I am a temperance man in principle, and am fully satisfied that alcohol has done more harm than all the wars, famines and pestilences that have afflicted the world. I think the theory of its operation can be explained. The tubercular diathesis is incompatible with the state of the system in a regular toper. The pale, feeble and cachectic are most subject to tuberculosis, and the most beautiful and delicate of the female sex (and they never drink) are the special marks at which the insatiate archer aims his phthisical darts. The tubercular deposits seldom take place until after the system is partly broken down by want of nutrition, or by exhaustion from some cause. Respiration and animal heat are kept up by carbonaceous matters being taken into the blood, to combine with oxygen in the lungs and tissues. Alcohol finds its way here with the greatest facility, not requiring the tedious and often difficult process of assimilation. Cod-liver oil, too, perhaps, acts in a similar manner on similar principles. I must not be understood as recommending drunkenness, hardly to save life. I should be pleased to see the experience and observation of others on this point in the journal.

*Tuberculous testicle treated with paste of chloride of zinc.* By Dr. Philippeaux of Lyons.—With the exception of cancer, it is in the different forms of surgical diseases due to a scrofulous constitution that the paste of the chloride of zinc appears to produce the most favorable results. Caustics may be employed in lesions of this nature to fulfill two distinct indications:—1, destruction of altered tissues; 2, to give to subjacent parts sufficient vitality to undergo cicatrization. This latter indication is without contradiction the most important in the local treatment of alterations of a scrofulous nature, and it is well known how difficult it is to overcome that tendency to immobility which is characteristic of these affections. The principal circumstances in which cauterization by chloride of zinc has appeared to M. Bonnet to produce good results are,—superficial tuberculous glands, old fistulous tracts, fungous ulcerations, sloughing of skin consequent upon cold abscesses, superficial caries, &c. In cases of this kind superficial cauterizations more frequently produce a sufficient degree of local reaction; but if the tissues are profoundly

altered it is often necessary to act with more energy. The following observations, to which many others might be added, afford an example of the happiest results which follow cauterization in cases of this nature :

In a young man, æt. 21, of a highly scrofulous constitution, the right testicle presented the following alterations : Its size is nearly that of the fist ; it is hard, and presents at different points an indistinct fluctuation ; three fistulous tracts, which have opened within two months, discharge grumous matter. The disease is of six months' duration, the tumor being developed without pain. On the 12th of April 1851, M. Bonnet commenced the treatment by introducing into the fistulous tract a bit of chloride of zinc, which gave rise to extensive sloughing. On the separation of the eschar, another application of paste was made in the cavity produced by the caustic, which extended even into the substance of the testicle. By this second application, the three points first attacked are united into one deeply-sloughing surface ; it then became easy, by removal of the eschar, and successive applications of caustic, to accomplish the total destruction of the tumor. Three applications of the caustic were still necessary, and, like the two first, gave rise but to a moderate degree of pain. The spontaneous falling of the last eschar took place April 25th ; the wound resulting was completely closed on the 25th of May, the forty-third day after the first cauterization. No accident interrupted the treatment.

*Hydrocele cured by an ointment of digitalis.*—M. Bellucci reported five cases in 1854 cured by this method. Dr. La Farge, of Toulouse, reports another case on the right side cured in six weeks by frictions of the following ointment : Powdered leaves of digitalis, 6 parts ; lard, 30. A suspensory bandage has also to be used. It will be remembered that this journal reported several cases, in the second volume, of ascites cured by a similar application to the abdominal parieties.—*Phil. Med. and Surg. Journal.*

*Depletion in dysentery.*—I have practised leeching in this disease, particularly *circa-anum*, to a greater extent than is usual among medical officers, and always with great benefit ; indeed it appears to be, if employed early, the principal remedy at our command, and this is easily understood by considering the connexion which exists between the hæmorrhoidal and mesenteric veins, the former freely anastomosing with the latter, the leeches so applied emptying the mesenteric and portal system. Indeed, after long experience in the

treatment of this disease in Burmah, I am quite convinced that not only is the disease cut short by free leeching, (of course pursuing the other means sedulously also,) but thickening of the mucous membrane, ulcerations, and other changes of texture, which long continued inflammatory action produce, causing tedious convalescence, lingering illness, and often fatal results, may be prevented in a great measure by active leeching at the beginning. There is a much less frequent form of dysentery, however, where local depletion is not sufficient, and will not arrest the frightful inflammation that is going on. It is confined to the rectum, and is of the most acute and intense kind.—*Dr. Davidson in Indian Annals.*

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SURGICAL.

Dr. E. Aleix, in an article addressed to the *Moniteur des Hopitaux*, speaks highly of the uses of collodion in the treatment of varicose veins. The pressure produced on the part, after evaporation has taken place, is equal and well kept up, and as a palliative remedy, it cannot be too highly praised. In varicocele he applies it to the scrotum, and the effect is such as to render it difficult to discover by the touch, the bundle of veins.

M. Aleix has also used the collodion in contusions with extravasations of blood, hygroma and synovial tumors, with marked success.

*Chloroform in the insertion of an issue.* By M. Danyan.—M. Richet said: I shall finally allude to the happy effects of the vapor of chloroform when thrown on ulcerated surfaces, which have been made known to us by Dr. Hardy of Dublin, M. Moissenet and my colleague, M. Gosselin.

M. Danyan said: Having had to establish an issue on M. Roux, I made use of Dr. Hardy's apparatus. I employed the Vienna paste. I directed the vapor of ether for ten minutes on the nape of the neck, where the issue was to be formed; the pain was completely annihilated.

*Gazette des Hopitaux.*

*A painful stump treated by the application of chloroform vapor.* (Under the care of M. Larrey.) What appears certain is, that the vapor of chloroform freely directed to a painful point, immediately allays the sufferings of the patient. Thus at Val de Grace, after an amputation of the thigh, the stump

becoming excessively painful, M. Larrey made use of Dr. Hardy's apparatus, and as soon as the vapor of chloroform came in contact with the wound, the pains were soothed.

*Journal de Medecine et de Chirurgie Pratiques.*

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#### MATERIA MEDICA AND THERAPEUTICS.

Professor Langenbeck, of Berlin, makes use of chloroform as an injection in hydrocele. He much prefers it to the tincture of iodine now so much in vogue; he attributes the cures effected by this substance to the alcohol of the tincture and not to the iodine it contains. He injects from one to three drachms into the sac.

*New remedy for tape worm.*—Professor Osborne, of Ireland, recommends tannic acid for tape worm, on account of its known action on albumen and gelatine. He has seen them curled and contracted, and broken down, when expelled after this remedy.—*Western Lancet.*

*Paste of allium cepa as a remedy for epistaxis.*—B. Rorer, M. D., of Germantown, has favored us with a communication in which he extols the efficacy of a paste made of the allium cepa in arresting atonic hemorrhage from the Schneiderian membrane.

The directions for making the paste are as follows:

"Take the inner portions of the bulb of the al. cepa, or common onion, cut it fine, mix it with an equal portion of flour or bread crumbs, adding a sufficient quantity of strong vinegar to make a consistent paste." This paste is applied by pressing it into the nostril with the ball of the thumb till no more can be introduced, when the plug is to be secured by a bandage. Several cases are detailed illustrative of its effects, one of which we shall quote.

G. F., aged 49 years, a baker, was attacked, March 6th, 1847, with epistaxis without any premonition, while attending to his heated oven, and had lost, he stated, ten or twelve ounces of blood before Dr. Rorer saw him. Dr. R. had him placed in a cool room, washed his face and head with iced water, and injected the same into his nares, and afterwards solutions of alum and of the metallic salts. Alum and finely-powdered galls were then applied by means of a quill, and lastly plugged with lint wet with astringent solutions resorted to. At the same time twenty drops of muriated tincture of iron were given every two hours—all without any avail. At

this time a German named Seibert advised the onion paste, which was used with the effect of completely arresting the hemorrhage.—*American Jour. of Med. Sci.*

*On the fluid extract of scutellaria lateriflora.* By Joseph Bates, M. D.—This plant, not many years since, was held in high repute, as an antidote in canine madness ; and kept as a secret. Dr. Vanderveer is said to have prevented more than three hundred persons from becoming mad, by the exhibition of this agent. It has, however, since been thoroughly tested, and found utterly worthless in the treatment or prevention of hydrophobia. In consequence of its failure, in the cure of a disease over which medicinal agents possess little or no control, it sank into desuetude, and was by many swept from the catalogue of officinal agents. Conium, now regarded eminently valuable in the treatment of a variety of diseases, once met a similar fate in its history, in consequence of failing to cure scirrhus diseases, for which it had been regarded as a specific. Scutellaria, like conium, will yet be found highly successful in the treatment of many diseases, but is not to be considered as a specific in any.

Lately I have been using Tilden's fluid extract of scutellaria, with signal success, in the treatment of diseases attended with nervous irritation and irritability, restlessness, &c. In the treatment of children, it is invaluable for allaying these symptoms. The dose is a teaspoonful, repeated as often as the circumstances or indications require. It may be relied upon in some forms of hysteria. Patients convalescing from typhoid fevers, pneumonitis, arthritis, &c. or any disease with those symptoms, will be shortly relieved by one or two teaspoonsful of this preparation. I have no hesitation in saying that those who give it a fair trial will find it efficient in the treatment of many diseases for the relief of which small doses of opium are frequently given, without any of its unpleasant sequences. Much more might be added in bringing this subject before the profession, but I have already, doubtless, trespassed in making my communication too long.

*New Lebanon Springs, N. Y. May 7th, 1855.*

*Boston Medical and Surgical Journal.*

*Relaxing effects of chloroform on the sphincters.*—From the Union Medical of Paris, we learn that Dr. Guisard had taken his child, a boy three years old, to his friend and surgeon, Rigal, to be relieved of a painful phymosis, which prevented micturition and defecation. Placing him under the influence of chloroform for an operation, the bladder and rectum were

completely emptied as soon as insensibility was produced by the anæsthetic agent. In 24 hours his distressing symptoms had recurred, when chloroform, without an operation, again afforded relief. The question arises, if we have not in anæsthetic agents a new, precious and efficient therapeutic recourse in cases of spasmodic retention of either urine or fæces?

*Collodion to cure salivary fistula.*—Rodolphe relates in the Medical Gazette of Paris, an obstinate case of salivary fistula, which resisted several attempts by other means to heal it up, when the application of collodion was followed by success.

*Hydrate of magnesia as an antidote in poisoning.*—Schuchardt represents as the result of his experiments that hydrate of magnesia is a certain antidote, not only for arsenious acid, either in solution or substance, but also for corrosive sublimate, for the salts of copper, and even, although in this respect the experiments are not satisfactory, for the alkaloids, such as morphia and brucia. The hydrate of magnesia may be prepared by mixing slightly calcined magnesia with water. In poisoning with arsenious acid the quantity of magnesia given as an antidote should exceed eight times the weight of the poison. For corrosive sublimate the antidote need not exceed five times the weight of the poison.—*Journal d' Pharmacie d' Anvers* and *Phar. Journal*.

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#### PHARMACY.

*Concentrated wine of asafœtida.*—By Henry N. Rittenhouse, M. D. of Philadelphia.—Every pharmacist must have experienced the inconvenience and delay of preparing the asafœtida mixture (or milk of asafœtida as it is commonly called) of the U. S. Pharmacopœia, when it is suddenly called for in small quantities; and as it is the best of all the preparations of this drug, especially for infantile cases, it should be carefully made, and not as is often the case, (with those whose object is to save time and avoid a little trouble, without any thought as to the consequences,) prepared by adding tincture to the required quantity of water until it has acquired the proper degree of milkiness to resemble the officinal mixture, a practice which cannot be too highly censured, as it contains a great deal of alcohol, and is of unknown strength. I have made a preparation bearing the name at the head of this article, which I think will remove some of the objections to this officinal, as it is in a concentrated form, easily prepared,

containing but little alcohol, is of known strength, and can always be kept on hand. Take of asafœtida  $\frac{3}{4}$  ss troy; white wine f. 3 x.

Rub the asafœtida in a mortar to a coarse powder, then add the wine gradually, triturating until all the asafœtida is suspended. Wine of asafœtida as thus prepared is white, of the consistence of syrup, and has the odor of the drug fully developed. This quantity yields to two troy ounces of wine; and as each troy drachm contains fifteen grains of asafœtida, the mixture or common milk of asafœtida is easily prepared by weighing the required quantity into a bottle, adding the water, and shaking them well together. For instance, in making one fluid ounce of mixture of asafœtida, all that is necessary is to weigh out one drachm of the wine and add seven drachms of water, and shake them together: this forms a perfectly even mixture without any of the usual inconveniences. The quantity of alcohol in a fluid ounce of this mixture is so small as not to be objectionable, and in the wine it is an advantage, as it tends to preserve it. I have kept it in ordinary corked vials three months, partly during summer, without the least perceptible change.

The asafœtida used should be free from all impurities, and the wine thoroughly shaken up before using, as it is impossible to suspend perfectly for an indefinite period so large a quantity of the gum resin in so small a quantity of the menstruum. The object of making it so concentrated was, that the alcohol of the wine might not be present in any considerable amount. The unpleasant odor of asafœtida can be somewhat disguised by making the mixture with peppermint or spearmint waters, where they would not be objectionable. I have tried the same experiments with ammoniac, and with similar results.

*On compound syrup of squill—hive syrup.* By A. P. Sharp, M. D. of Baltimore.—Hive syrup being one of the most common and important syrups kept by the pharmacist, it is all important that it should be properly prepared and not likely to ferment. In order to avoid the latter difficulty (which is the common complaint among druggists and pharmacutists,) I have tried several processes, intended at the same time, to get possession of all the active principles of the root. The following method has proved the most effectual in overcoming the difficulty spoken of, and at the same time yields a beautiful, active and certain preparation.

As soon as one lot is prepared I immediately put another one under way, as follows:

The seneka and squills, (of each 8 oz.) are bruised to a coarse powder, and macerated with one gallon of diluted alcohol (alcohol 1 quart, water 2,) until my stock of syrup is nearly out, (sometimes standing two or three months,) and then pressed or transferred to a percolator and displaced. The tincture is then evaporated until I am satisfied there is no more spirit left. I then filter, when cold, to get rid of the albumen and resinous matter, and then add the sugar (7 lbs. troy) and evaporate (without boiling) to the proper quantity, (6 pints,) strain if necessary, and add the tartar emetic (96 grs.) Any one pursuing this plan I think will obtain a syrup that will prove satisfactory to himself as well as to his customers.

*New method of dissipating the rancid odor of fatty substances.* M. Griseler discovered accidentally that the addition of a small quantity of nitric ether to oils, has the effect of entirely removing any rancid odor which they may possess. Evaporating by heat to drive off the alcohol of the ether, leaves the oils as limpid and sweet as ever.

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#### ABSTRACTS.

In the New York Journal of Medicine for May 1855, we find a long and elaborate article upon *Puerperal Anæmia*, or the anomalous affection, known in the United States by the appellation of the "*nursing sore mouth*," by M. L. Knapp, M. D.

In this article, letters in reply to a circular letter of Dr. Knapp are introduced from physicians in various portions of the United States, giving the history, symptoms, treatment, &c. of the disease.

From the facts thus presented, we find that pregnant and suckling women are most obnoxious to the disease, but that it is not wholly confined to them; that any feeble, delicate or broken down constitution may become subject to the disease—persons exhausted and anæmic from protracted drains upon the system, from diarrhœa or menorrhagia, or those who are the subjects of mental depression, &c.

And we also find that the disease has in some instances assumed an epidemic character. The symptoms of the disease are, first, debility, and lassitude and general coolness of the surface, followed by heat and irritation of the mouth, with increased flow of saliva; red spots on the side of the mouth and tongue, which terminate in ragged ulcers of various sizes.

Soon after these ulcerations appear, there is tormina all through the bowels, followed by fever, loss of flesh, morbid secretions, stools thin, light colored, watery, sometimes bloody, or containing flocculi of a white color; and lastly, if the disease is not checked, hectic fever and death.

The treatment generally recommended, is to strengthen and invigorate the constitution by the use of generous diet, exercise in the open air, baths, tonics, weaning the infant, if the mother be nursing, &c.

The medicines most relied on, are the vegetable and mineral acids, the salts of potash and soda, chalybeates, quinine, cod-liver oil and opium, with astringent washes for the mouth, both vegetable and mineral.

The writer, Dr. Knapp, after considering all the evidence on the subject, considers the disease "nothing more or less than *land scurvy*," and treats it accordingly.

We have only to add, that in the few cases of the disease which we have been called upon to treat, we have found a combination of nitrate of silver and nitrate of bismuth, (the fourth of a grain of the former and five grains of the latter) given in pill form, several times a day, a valuable adjuvant to the general tonic treatment.

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### Bibliographical Notices.

We have received from the publishers, Messrs. Blanchard and Lea of Philadelphia, through Mr. Geo. M. West, Jones' and Lieveking's Pathological Anatomy.

This is the first revised edition of the London work, and is illustrated with three hundred and ninety-seven well executed wood cuts, many of which are entirely new, and are taken from drawings in the portfolios of the authors. We have not as yet read the work, but from its arrangement and table of contents, we take it to be one of the most comprehensive works on the subject of pathological anatomy extant. A large number of illustrations have been added to the original London edition by the American publishers, as well as an account of the microscopical observations of Dr. Donaldson of Baltimore on the characteristics of true cancer cell.

We have also received a work entitled Surgical Reports and Miscellaneous papers on Surgical Subjects, by George Hayard, M. D., President of Massachusetts Medical Society, &c. Published by Phillips, Sampson & Co. of Boston and J. C. Derby of New York.

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ORIGINAL ARTICLES.

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## Unity of the Human Race.

BY JAMES BOLTON, M. D. OF RICHMOND CITY, VA.

The progress of science has been greatly retarded by the partizan spirit of philosophers. Truth has been obscured and its investigation embarrassed by the want of candor and fairness of disputants who have been more intent upon establishing some favorite theory than upon honestly enquiring for truth, regardless of what the result may be. Truth has suffered more by this method of defense than by unfair assaults. In open controversy with error it has nothing to fear, but when placed in a false position in connection with error, it has suffered a temporary defeat, and thus been brought into disrepute when the latter has been overthrown.

These remarks are fully illustrated by the history of the religion of the Bible. Its career has ever been triumphant when attacked by error, but when it has been associated with error in its defense, its friends have brought upon it the disgrace of temporary defeat.

The deductions from the layers of lava by Bridone, the astrolabe of the temple of Dendera, and from eastern tables of eclipses, have proved harmless to christianity, and have only

served to expose the anxiety of pretended philosophers to overthrow a religion which they secretly hated.

But when the authority of the same holy religion was resorted to for the purpose of checking the progress of science, when Roger Bacon was imprisoned under the law of Moses abolishing witchcraft, and Galileo met a like fate for asserting the annual revolution of the earth around the sun, because of its pretended inconsistency with the word of God and his church, many friends of christianity were driven into ranks of infidelity, and those who remained dreaded the result of the conflict.

When geology was attacked because it proved a preadamite existence of the earth, whereas Scripture was supposed to teach that its creation was coeval with that of man, infidelity rejoiced in the expected opportunity of triumph.

In such instances, christianity has been saved by releasing it from its forced and unnatural connection with error.

But why all this apprehension in regard to the truth of Scripture history? Is it possible that the works of God and the word of God can contradict each other? Away then with all this mawkish sensibility in regard to philosophical enquiries. Let them be as free as possible. If the deductions of science appear to be opposed to the truths of Scripture, there is no occasion for the friends of the latter to reject them with holy horror, and to denounce their supporters. It is the part of sound philosophy to be modest and distrustful of itself. Because two propositions *appear* to be irreconcilable, it should not be dogmatically insisted that they are essentially so. If both appear to be true, let both be received, unless such reception involves a positive absurdity, and let time and patience solve the difficulty and remove the apparent discrepancy.

These last remarks are applicable in their fullest extent to the controversy in regard to the subject of this article, the unity of the human race.

One class of philosophers have satisfied themselves that the characteristics of various species are indelible—that neither

climate nor habits of life nor any other of the known laws of nature will convert the Caucasian into the Malay, the Red-man, the Ethiopian or the Papua—nor vice versa.

Another class of philosophers, taking their stand upon the statement of the sacred historian, that all mankind have descended from a single pair, have labored with much learning and ingenuity to trace all the deviations from a perfect model, to sudden or long continued operations of nature's laws.

Now, these two theories appear to be wholly antagonistic. It would seem that if the races be not convertible, they must each have been derived from a separate original stock, and that if all were derived from a single pair, all the diversities of color, form and character must have been produced by ordinary natural causes. But adopting the rule already laid down, I see nothing essentially contradictory in these two theories, and am therefore willing to accept both, provided that both be established by sufficient evidence. I am, therefore, prepared to say that all mankind have descended from a single pair, and that the diversities which now exist cannot be produced by any known laws of nature, and then I am content to wait patiently until farther researches shall reconcile the two propositions.

In regard to the first: It appears to me that the language of the Jewish historian is too explicit to admit the creation of more than a single pair. It is evidently his design to record the origin and early history of mankind, especially in reference to the principles of the divine government. Separate and unrecorded creations of other races besides that of which Adam was the progenitor, would involve serious defects in the history itself. The fall would involve but a single race, and the plan of redemption would apply to that alone. We have no right to assume the creation, trial and fall of as many pairs as there are races, without the least evidence of the fact.

The whole Bible is a commentary upon the great doctrine of the fall of mankind, through the transgression of one representative, and its restoration by the work of redemption

performed by another. All the races are regarded as equally involved and equally interested in both these great transactions.

Without going further, it seems to me that this dilemma is fatal to the proposition of several separate creations of the different races—at least to the believer in the truth of Scripture—and upon this belief the proposition in question is predicated.

In regard to the second proposition: If we take this fact alone, that the principal races certainly existed at least thirty-five hundred years ago precisely as we find them now, we cannot avoid the conclusion that the distinction of race must have been nearly coeval with the flood. These characteristics, then, cannot be attributed to the long continued operation of natural causes. This act has led some philosophers to the conclusion—and it is quite a popular one—that each of the three sons of Noah was the progenitor of a distinct race. But then the difficulty arises that all the varieties of man cannot be classified under one or the other of these three races. Thus, while Cuvier adopts this classification, Blumenbach enlarges the number to five, and Bory de St. Vincent still further increases it to fifteen.

It is evident, from the facts stated, that each race must have had a progenitor possessing peculiar characteristics, which were inherited by his descendants, and that each of these progenitors existed shortly after the flood. It will surely not be contended that the distinctions of race were produced by differences of climate and mode of life during the first few hundred years immediately succeeding the flood, and that these varieties have continued the same ever since. Were the descendants of one of the sons of Noah converted into negroes by the operation of these causes during a period of three or four hundred years? Such an assumption is altogether gratuitous, for we have no evidence of such an occurrence, either from historical records or from observation. If we can trace the negro race back as far as any historical records carry us, we have a right to conclude, reasoning from

the known to the unknown, that the progenitor of the race was a negro.

An appeal has been made to the distribution of the races, in proof of the sufficiency of climate to produce varieties of complexion. But what are the facts of the case? The inhabitants of regions near the poles are dark skinned; those of the temperate zone are some white and some swarthy, and that the inhabitants of the tropics are some white, some swarthy, and some black. Is there anything like a shading off from a black tropical race to a bleached polar race, after making all due allowance for migration? If there were no other fact, the existence of the White Berber race, between the tawny Moors of North Africa and the negroes of Ethiopia alone would be fatal to the hypothesis. This singular people, possessing the characteristics of the Caucasian race, both in color, form, enterprise and indomitable love of freedom, have from time immemorial occupied the mountains and valleys of a belt of land traversing the northern part of Africa, south of the Barbary States. If climate had in a few hundred years metamorphosed a Caucasian into a negro in Ethiopia and into a Moor in the Barbary States, why has it left the Berber unchanged for thousands of years?

But we are told that the Jews differ in color in different countries. In reply to this, we state that the Jewish nation, even at the time of its settlement in Canaan, were not all pure lineal descendants from Israel. They had resided for centuries in Egypt, where it is highly probable intermarriages to some extent had taken place. Their leader himself had an Ethiopian wife. Intermarriages occurred between them and the remnants of the aborigines of Canaan. During their several dispersions by foreign conquerors, the Babylonish, Roman, &c. the Jewish blood must have lost to a great extent its original purity. In addition to this, foreigners were introduced into the Jewish household by the rite of circumcision, and in some instances, as that of the family of the Harlot of Jerico and the Gibeonites, whole families were permitted to live among them, who no doubt adopted their customs, civil and religious.

When, therefore, we hear of black Jews in Hindoostan, as an argument to show the marvelous changes wrought by climate, we demand the proof *that they ever were white!*

Besides the mere shade of complexion, depending upon the amount of coloring matter in the skin, is certainly not the whole nor the most important characteristic of race. The anatomical, mental and moral differences are to the philosopher far more important. Can all these be traced to climate and mode of life?

From the evidence we have, it would be more philosophical to assert that their habits and mode of life were the consequence not the cause of the varieties of race. That as in the case of all other organized beings, each race was placed in circumstances and acquired habits precisely adapted to its nature. That the negro being proof against malaria and extremely indolent, was placed in a region where pestilential atmosphere would have destroyed the other races, and where the necessities of life are provided spontaneously and in profusion. Still, I would by no means deny the well established effects of climate upon the human organism. We constantly observe the face and hands of the Caucasian to darken under a summer sun, and to become bleached during the cold, long nights of winter. But does this prove that by long residence in a tropical climate he would become a negro, or that his descendants would be gradually transformed into members of that race? Would the tibia become more arched, the os calcis become more protuberant, and the facial angle become more acute? *I appeal to history for a single instance of the transformation of one race into another.* None has ever been—none can be furnished.

In regard to albinos: It is well known that they are mere monstrosities, preserving all the characteristics of the race to which they belong, except that of color.

After all, what do these much exaggerated effects of climate amount to? Why, simply, certain, temporary changes, which *never transgress the limits of race.* The complexion and health of the Ethiopian are affected within certain limits, but

he is not thereby transformed to one of a different race. He always preserves his identity, ready to be restored to his primitive state by being transported to his native congenial clime. Have the Anglo-Saxon, the Celt or the Ethiopian in any degree approximated the Aborigines of America, either our Redmen, or the races whom they displaced?

The argument from analogy is not strictly sound, for it is well known that plants and inferior animals are far more impressible by natural causes than is man. If, therefore, changes of species in them may be produced by climate and cultivation, this cannot be predicated to the same extent of man.

Further, the advocates of the theory of transmutation of race involve themselves in another dilemma nearly if not quite as distasteful to the believer in Revelation as the creation of distinct races, viz: the theory of development. The nearest approach to humanity among inferior animals, as some specimens of the ourang-outang can scarcely be said to be more inferior to the lowest specimen of mankind, such as some of the Papuans or perhaps even a still more degraded race, than are the latter to the highest specimens of the Caucasian. If, then, the varieties of the human race may be transmuted by natural causes, one can scarcely stop short of the derivation of the race by the same causes from an inferior class of animals; these from one inferior still; and so on, down to the lowest form of organized matter.

I may be asked, then, have you no theory by which the apparent discrepancy between the book of revelation and that of nature may be removed? You admit that proceeding from the same infallible author, they must ever harmonize. Can you offer no fair rational solution of the difficulty.

I answer, that believing as I do in an original creation, I have no difficulty in believing in subsequent changes of form by the same Almighty power. The power to create involves the power to transform. But it seems improbable that if such transformation by miraculous power had ever taken place, that the sacred historian would have omitted to record it. I believe he has not left the event unrecorded. In order

to explain myself, I must reason back (the only safe method) from the known to the unknown—from facts as presented to our observation now, to those of a remote period of the past enveloped in obscurity.

The first fact which I observe is, that every distinct race has a distinct vernacular tongue. Its language is as characteristic as its complexion, disposition and habits of life, and may be said to be interwoven with the two latter. Indeed a distinguished physiologist has given us reason to believe that the vocal organs of each race and its language are mutually adapted to each other, so that an individual born in France, of French parents, and transported in infancy to England, will not speak the Anglo-Saxon so well as it would have spoken its own language, if it had remained in its native land. There is certainly, however, an adaptation of the language to the intellectual character and moral sentiment of the people by whom it is spoken.

In the next place, we find everywhere in Scripture the word tongue or language used as a synonym for race.

If we trace history back in the only authentic record of the time, we reach a period when “the whole earth was of one language and of one speech.”

We next learn that mankind united in an act of rebellion against God; and in the history of the transaction, we meet with this remarkable expression: “Behold, *the people is one*, and they have all one language.” Here is a plain statement, that at this time there was but one single race, speaking one language. It seems further to imply, that the conspiracy was facilitated not merely by identity of language, but by identity of race. When, therefore, their designs were frustrated by the confusion of tongues, it does no violence to the sacred narrative to conclude that there was at the same time a corresponding confusion of race. We learn further, that mankind were from thence scattered abroad upon the face of all the earth. Have we not here, then, a plain history of the peopling of the different regions of the earth by different races, speaking different languages?

If further we reason from final causes, we readily perceive how precisely and completely the design would be accomplished by confusion of race as well as of language. The history of mankind is a history of jealousies and wars between the various races. Until a very recent period, such has been the animosity between two races, the French and the English, separated only by a narrow strait, that instead of uniting in enterprises for their mutual welfare, they have been continually engaged in harassing and destroying each other. Inasmuch, then, as the design was to destroy all sympathy of disposition and all unity of purpose, and to separate mankind into distinct nations, we see how fully the end would be accomplished by a miraculous change of race.

Furthermore, in the geographical distribution of these colonies, it accords entirely with our ideas of the divine wisdom and benevolence, that they should be physically adapted to the new peculiarities of climate, &c. in which they were placed.

I have thus hastily sketched my views upon this interesting subject, and would gladly see them fully developed by more competent hands.

Before closing, I must again enter my protest against the denunciation of such men as Agassis and other natural philosophers, whose researches lead them to conclusions different from those held by mere theologians, who have neither the time nor the opportunity of fully investigating these subjects for themselves. Let them ever bear in mind the beautiful maxims of their holy religion, and illustrate them in their own conduct towards those who may hold different views from their own. Let their discussions be conducted with humility, modesty and courtesy, for it may be that in regard to the point at issue, their opponents may be more orthodox than themselves.

## On the Danger attending the Sale of Poisons, and the Remedy.

BY JOSEPH LAIDLEY, PHARMACEUTIST, RICHMOND, VA.

Of late years, the instances of criminal and accidental poisoning have become fearfully numerous. They seem to be confined to no locality or region, and, in our own state, it is now so frequently practiced or occurs, that in almost any weekly newspaper we may take up, we can find an account of criminal, accidental, or an attempt at, poisoning. We hear of poisons of various kinds being introduced into tea or coffee, arsenic mixed with bread, and other poisons, variously mixed with food, and in too many instances accomplishing the fatal results designed by the wicked authors. Cases of poisons being *accidentally* administered are, unfortunately, not unfrequent. To show that the sale of poisons is not properly regulated now, that the accidents and crimes referred to may be greatly lessened by properly regulating the sale of certain poisons, that such a course is necessary for the public good and safety, and, consequently, is a proper and legitimate subject of LEGISLATION, is the object of this article.

By the term *poisons* we include, for our present purpose, those substances which are popularly known as such, among the more common of which, are arsenic,\* corrosive sublimate, nux vomica, hydrocyanic and oxalic acids, and the poisonous vegetable alkaloids, (morphia, strychnia, &c.) It is not necessary to consume space in citing cases of poisoning. It is well known that that crime is one of frequent occurrence, sometimes, too, perpetrated on a wholesale scale, a whole family or even the guests at a wedding party, becoming the victims. We will, therefore, pass on to prove that "*the sale of poisons is not properly regulated now.*" The only states in which any *state* laws exist against the indiscriminate sale of poisons, are Ohio, New Hampshire and New York. See Proceedings of

\*Arsenic, wherever it occurs in this article, refers to the arsenious acid of commerce.

the American Pharmaceutical Association for 1853, p. 8-10. But in these states, the laws on the subject are of so imperfect a character that they may be easily evaded, or so little attention is paid to the execution of them, that they may be violated with impunity.

In our own state, like most of the others, poisons are sold not only by professed apothecaries, but also by country store-keepers or "general dealers," who, with stocks of commonly used medicines, such as Epsom salts, cream of tartar, super-carbonate of soda, laudanum, paregoric, calomel, essence of peppermint, nostrums, etc. keep and sell arsenic and sometimes other poisons.

We are also informed that arsenic, corrosive sublimate and strychnia are frequently sold in the country by irresponsible WANDERING PEDLARS.

To show how the common poisons are sold in the state of Virginia, we will insert the answers from some of the towns in this state, to two out of a number of queries propounded by the writer, last year, to druggists, &c. throughout the Southern, Atlantic and Gulf states, in the discharge of his duty as a member of a committee of the American pharmaceutical association, charged with the work of collecting the statistics of pharmacy in the United States.

Question No. 9. How many general dealers in your locality sell medicines; and do they also sell such *poisons* as arsenic, corrosive sublimate, strychnia, opium, &c.?

Question No. 16. Are the agents popularly known as poisons, generally sold by druggists and apothecaries; what kinds are mostly purchased by the public, and for what purposes employed?

#### ALEXANDRIA.

Answer to 9th question. Most of the grocers sell commonly used medicines. Poisons are sold by ten grocers, as

well as by druggists; the latter exercise some discrimination in selling them.

Answer to 16th question. They are, arsenic for destroying rats and other vermin, corrosive sublimate to destroy bed bugs, opium as a composer, and is used habitually by many adults.

#### LYNCHBURG.

Answer to 9th question. None sell poisons. Some sell commonly used drugs.

Answer to 16th question. Sold only by druggists: the principal kinds are arsenic, strychnia, corrosive sublimate and oxalic acid. The first two for destroying vermin, corrosive sublimate *medicinally* by QUACKS, and the last for bleaching.

#### HARPERS FERRY.

Answer to 9th question. Medicines, but not poisons, are generally sold by dealers.

Answer to 16th question. Yes—arsenic and strychnia, &c. mostly for killing rats.

#### WINCHESTER.

Answer to 9th question. Four.

Answer to 16th question. Yes—arsenic, &c.

#### CHARLESTOWN, *Jefferson Co.*

Answer to 9th question. None known of.

Answer to 16th question. Yes—arsenic, strychnia and corros. sublimate for rats, crow killing and bed bugs.

#### PORTSMOUTH.

Answer to 9th question. Not to my knowledge.

Answer to 16th question. Yes—arsenic, corrosive sublimate and strychnia for killing rats, mice and vermin.

## WHEELING.

Answer to 9th question. Four sell poisons—strychnia, arsenic, opium, &c.

Answer to 16th question. Arsenic and strychnia are sold, and much used to kill rats and dogs. Arsenic also is much used in the manufacture of glass.

SHEPHERDSTOWN, *Jefferson Co.*

Answer to 9th question. Six—arsenic, opium, corrosive sublimate, &c.

Answer to 16th question. Yes—opium, corrosive sublimate, arsenic and others.

## DANVILLE.

To 9th question, no answer.

Answer to 16th question. Yes.

Such is the condition of the traffic in some of the more important towns of the state. In the country, arsenic at least, can almost always be obtained from the general dealers. The above answers give information concerning forty-five so called drug establishments; add to these those in Petersburg and Richmond, and we have seventy-five in all. If we subtract these from one hundred and ten, the total number of apothecary establishments in this state, we will have only thirty-five drug stores in seventeen localities, to supply all the balance of Virginia with these substances: and that this small number could supply persons in so large a portion of the state with poisons, and with the facility too with which they obtain them, cannot be believed, and we can only account for it by supposing that as the general dealers mostly in the country keep them, they furnish them. These persons buy of the poisons, arsenic mostly, which they obtain in small packages, generally of 1 oz. each, which they sell as ratsbane, and, as far as

the writer is informed, pay little or no regard to the character of the purchaser.

In this section, the poisons (popularly known as such) mostly sold by druggists, are arsenic, Fowler's solution, strychnia, oxalic acid, corrosive sublimate (the "solution, for bugs,") and opium. Besides these, many others are sold occasionally—such as prussic acid, preparations of the narcotic irritants, essential oils, the mineral acids, blue vitriol, and various pigments used by painters. These can generally be obtained by a white person without difficulty: some *few* conscientious apothecaries would enquire into the use that would be made of any of the less commonly used ones; and if not satisfied of its propriety, would refuse to sell them. With by far the greater number, however, the simple statement, if any questions were asked at all, that, arsenic being wanted, it is for killing rats, would be sufficient. We have known it to be sold in quantities of one pound at a time for this alleged purpose—this too sometimes to children. The purchaser's name even is frequently not known to the vender. A stranger stepping into a store and asking for arsenic in any quantity, would usually obtain it as easily as any one else.

We heard some time ago of a case where 1 lb. of arsenic was sent to a gentleman in the country, who had sent for twenty-five cents worth of ratsbane, meaning the preparation of phosphorus frequently sold under that name. The arsenic, although sent by a small boy, was carelessly put up in two wrappers, and on the outside one *only* was merely written "arsenic;" so that if the outer one had been removed, there would have been no indication left of the character of the dangerous substance.

This carelessness extends to other virulent poisons. For instance, we have heard of oxalic acid, which is much used for bleaching straw and cleaning brass, sent out of the store without any label attached. This is a very dangerous plan with any powerful agent, but especially so, when done with a poison which closely resembles in appearance a well known and much used medicine, viz: Epsom salts; between which

and the acid but very few, without carefully examining and tasting, could readily detect the difference. Arsenic resembles, when in powder, a great number of substances—as for instance, calomel, subnitrate of bismuth, tartar emetic, cream of tartar, and others. A case was reported some time ago, where a woman took the former for the latter, and died in consequence. There are other cases recorded where, from want of proper labels, arsenic has been given by mistake for arrow root, and even for magnesia. Cantharides and the essential oils, including those used for criminal purposes, are mostly sold without hesitation ; the same is true of almost all other poisons.

Such being the loose manner in which these dangerous agents are sold, any person *usually* being able to obtain them, minors as well as adults, and in many instances blacks as well as whites, when too, we remember the gross carelessness frequently attending the use of poisons in families, it seems really wonderful that more cases of accidental poisoning do not occur.

The facts above stated are sufficient, we hope, without detailing almost innumerable others, to prove that the sale of poisons is not properly regulated now. We pass, therefore, to the second proposition, viz :

*“Accidental and criminal poisoning may be greatly lessened by regulating the sale of poisons.”*

This has been attempted, as already stated, in New Hampshire, New York and Ohio. Laws regulating the sale of poisons in many of the European states, have been passed. In France a law was passed in 1846, of which the following are the principal provisions, viz :

1st. Persons wishing to engage in any occupation involving the use of any poisonous substance, had to give notice to the local authorities of his wish and his place of residence. For all poisons the purchaser was required to give a written order, signed by himself. All of which was recorded in a book kept for the purpose, as well as a description of the manner of using them.

2d. Poisons were only to be sold by pharmaciens, (pharmaceutists,) and, except when as above stated, only by the prescription of a physician, surgeon, &c. Such prescription had to be copied in a book, which was to be preserved for twenty years, and be produced at any time during that period, if called for. The label accompanying the medicine put up in conformity with such prescription, must bear the name and address of the pharmacien, and state whether it is intended for internal or external use.

3d. Arsenic, except for medicinal purposes, should not be sold, unless mixed with other substances.

4th. It contained a list of the poisons thus regulated; but the law having been found to be unnecessarily restrictive of the sale of many commonly used medicines, the list was subsequently remodeled, so as to embrace only such substances as come under

“The definition of a poison in a preventive\* point of view.

“All substances are considered poisons in a preventive point of view, which are possessed of a degree of activity, and of such properties, that they occasion death when administered in small doses, and may be conveyed into the system without being perceived by the senses.” †

According to the spirit of this definition, the following are poisons, viz:

Hydrocyanic or prussic acid; opium and its extract; arsenic and its preparations; cyanides of mercury and potassium; hemlock; corrosive sublimate; tartar emetic; nicotine; the poisonous vegetable alkaloids and their salts; digitalis, extract and tincture; ergot; phosphorus; belladonna, and its preparations; chloroform; henbane, extract and tincture; cantharides, its extract and tincture; nitrate of mercury.

“In Prussia, and perhaps in Germany generally, the law requires the apothecary to keep poisons in a closet under lock

\* That is, considered in reference to public security and the preventive regulations required for its maintenance.

† London Pharmaceutical Journal, vol. vi, p. 535-539.

and key, and not to sell them but under certain conditions to persons free from suspicion. The poisonous substance, be it arsenic or other, must be enclosed in a box, tied, sealed and inscribed with the German or French name, and the Latin name; and marked with a *death's head* or *three crosses*. It is also necessary in some of the German states, for the purchaser to give a receipt declaring the name and quantity of the poison, that it was dispensed according to regulations, and that the seller is exonerated from all blame for its misuse."

*Proceedings of American Pharmaceutical Assoc. for 1853, p. 9.*

In reference to the sale of poisons in England, we insert an extract from the report of the committee on the sale of poisons, made to the American pharmaceutical association in 1853. See proceedings for 1853, p. 9-10:

"In Great Britain, the country most analogous to our own in the character of its population, and the legal and economical usages that exist, the sale of poisons until recently was completely unrestrained by law, except perhaps a few municipal regulations. In the latter part of 1849, the subject of the loose manner in which the sale of poisons was conducted, and the frequent ill results that followed, was brought to the attention of the house of commons by the provincial medical and surgical association, praying that no druggist be allowed to sell arsenic without a license, under penalty; that *no person* be allowed to sell small quantities of arsenic unless combined with some distinctive coloring material, that every purchaser must have a witness, and that every vender should keep a strict record. The petitioners stated that, of the fatal cases of poisoning, *one-third* were from arsenic, and that in 1837-8 these cases amounted to 185!

"Pending the action of parliament, the subject was referred to a committee by the council of the pharmaceutical society, who, as a preparatory step, issued a circular of enquiries to 1600 members, over England and Scotland, querying whether the parties sold arsenic; under what regulations, if any, for

what objects, and to what classes of persons, what trades employ it, whether general dealers sell it, would it do to prohibit its retail sale, how is it dispensed, what number of accidents, and whether these occur from its use by agriculturists?

"The committee reported that a majority of the *chemists* and druggists require witnesses in selling arsenic, label the inner and outer wrappers, and some color it. The classes of persons who buy arsenic are colorists and chemical manufacturers, candlemakers, farmers, flockmasters, veterinary surgeons, shipwrights, glass manufacturers, and dyers in large quantities, and braziers, whitesmiths, bird stuffers, gamekeepers, gardeners, grooms, whitewashers, painters, pyrotechnists, ratcatchers, and housekeepers of all grades, for vermin, in small quantities. They ascertained that arsenic was employed most extensively through the agricultural districts, both for *sheep dipping* and for *steeping wheat*. About 40 lbs. of arsenic are required for every 1000 sheep to kill vermin. Of 728 answers, 509 advocated prohibition; yet the numerous legitimate uses of the poison render its sale necessary. One large farmer had killed in a year more than 40,000 rats. The committee arrived at the following conclusions, viz:

"1st. That with regular chemists and druggists, proper precautions are taken, and few accidents occur.

"2nd. That the unrestricted sale of poisons in general by *unqualified persons*, is the great source of danger.

"3rd. And that the total prohibition of the retail sale of arsenic is impracticable and inconsistent with the requirements of legitimate trade."

Subsequently to the above report, parliament passed a law requiring

1st. That every person, before selling arsenic, shall enquire for what purpose it is intended. The purpose alleged shall be entered in a book kept for the purpose, stating also "the quantity sold, day of the month and year of sale, name,

place of abode, and condition or occupation of the purchaser. Into all which circumstances, the vender "is hereby required and authorized to enquire of the purchaser," before the delivery of the arsenic, and this statement, when made, must be signed by both the seller and purchaser; and if the latter cannot write his name, a note of that fact must also be made.

2nd. When the purchaser is not known to the vender, the sale must be witnessed by a third party, who is acquainted with the former. The witness must state his place of residence, and sign his name in the same book.

3rd. That not less than 10 lbs. of arsenic shall be sold at one time, unless colored with soot or indigo, in not less proportion than 1 oz. of soot or half an ounce of indigo to each pound of arsenic.

4th. Arsenic shall not be sold to a minor.

5th. The law does not apply to arsenic used medicinally, or to the intercourse between *dealers*.

6th. The act refers to all colorless poisonous preparations of arsenic; and the penalty for violating any of its provisions is \$ 100.

The Ohio law was modeled after the English act—but from attempting too much, they secured only the law, which, from its comprehensiveness, accomplishes nothing.

Its 1st and 2nd sections are as follows:

"SEC. 1. Be it enacted by the general assembly of the state of Ohio, that it shall not hereafter be lawful for any apothecary, druggist, or other person in this state, to sell or give away any article belonging to the class of medicines, usually denominated poisons, except in compliance with the restrictions contained in this act.

"SEC. 2. That every apothecary, druggist or other person who shall sell or give away, except upon the prescription of a physician, any article or articles of medicine belonging to the class usually known as poisons, shall be required," &c.

The phrase "belonging to the class usually denominated

poisons," is entirely too indefinite. It might apply to perhaps at least one-third of the *materia medica*; consequently the law is a dead letter. A law similar in its general features to the English act, and applying also to corrosive sublimate and strychnia, requiring that these when sold in substance should be colored in the same manner as arsenic, and that corrosive sublimate, when sold in solution for destroying bugs, should have a certain proportion of spirits of turpentine; (say 1 oz. to 3 ozs.) mixed with it, which, by its smell and taste, would prevent its being introduced into food without being detected—the law also requiring that all ordinary poisons should be, when sold without a physician's prescription, distinctly labeled "poison," and, for the benefit of those who cannot read, bear the death's head and cross bones, would, we are satisfied, be productive of great good in our state, by lessening the evils under consideration. It would not accomplish all that could be desired; it would still leave other poisons accessible to wicked wretches who might abuse their use.

But to go farther would be almost impossible, without restricting the sale of articles of every day use; and while we should throw whatever safeguards we can around the public security, we should equally avoid infringing public rights, as well as that *over-legislation* which is so frequent in our country, and which, from attempting too much, often fails of accomplishing its objects. Strychnia and corrosive sublimate might properly be brought under control of law, but arsenic, especially, should be regulated as above described. It, from its cheapness and almost tastelessness, is the agent most easily obtained and misused, and the one which may be most easily mistaken for other substances. Being colorless, it cannot be detected by the eye when mixed with food. Being so nearly tasteless, it is not ordinarily perceived by the taste, and being to a considerable extent soluble in the liquids used at the table, it cannot ordinarily, when mixed in this manner, be discovered by the senses; but the admixture of soot or indigo, in the manner proposed, would almost always render its

presence evident, while it would not interfere with its use for any legitimate purpose except in medicine.\*

It would not then be so liable to be mistaken for other substances; nor would persons wishing to employ it criminally go to a store to obtain it, when an account of the transaction with date, quantity, &c. recorded, would be kept, and afford proof of their crime. The poisons previously mentioned as being probably sold by itinerant pedlars, are, it is said, not exhibited by them, but *are furnished on application*. This may afford a solution of the mystery sometimes attending the method by which negroes, and others in the country, get hold of these substances. The law should be so framed as to punish, in the severest manner possible, any one detected in dealing so nefariously.

Druggists in some of the eastern cities do not retail arsenic at all, and a number of others will only do so after receiving the most satisfactory proof that it will be properly used. If this plan were universally followed, there would be no need of the legislation here advocated; but as matters now stand in our state, a person wishing to purchase arsenic or any poison, would think it a great piece of impertinence for the vender to make any enquiries about the use to be made of it; nor does the druggist like to ask any questions, when he is almost certain he will give offence by so doing. The legislation recommended would render these precautions *necessary*. Until some such enactment shall be made, poisoning will be an easy matter. Arsenic can be obtained with facility by almost any one. The plan proposed would prevent servants

\* In reference to poisonous agents, medicinally employed, it would be well for physicians, in prescribing them, to order such quantities as will be, as nearly as may be, just enough to accomplish the desired end. Indeed, it would be better to have to replenish the supply than by ordering more than enough, have some left to put away, among, perhaps, other remedies used in the family, and where, after its character may have been forgotten, it may be improperly used. Where it can be done without alarming the patient, it would be well to have the word "poison" affixed to medicines of this class; and when the remedy is of a poisonous nature, and is intended for external use, the label should have distinctly written or printed on it, "For external use only."

and minors, except on the most satisfactory proof of being properly authorized to do so, from obtaining it, and it would be impossible for persons of doubtful character to obtain it; and persons who frequently get it for trivial reasons and are often careless in using it, would be restrained from taking the trouble necessary to procure it. These considerations, we think, justify the conclusion that accidental and criminal poisoning may and would be greatly lessened by regulating the sale of common poisons.

We have, we hope, shown that in no other way can the traffic be safely controlled; that by no other plan can the community be protected against the insidious revenge of the malicious, and the treachery and vindictiveness of servants. In short, that legislative measures on this subject are necessary for the public good and safety. We therefore pass on to the

4th proposition, viz: "*That the sale of poisons is a proper subject of legislation.*" Legislation on this subject would of course be opposed by some whose sales might be slightly diminished by the restrictions it would impose, or who would be too lazy to take the additional trouble it would render necessary.

In reference to the *right* of legislation, we consider there can be no question about. It rests on the simple ground that society has the right to protect itself. It is on this principle that nuisances are required to be abated; that factories giving off offensive or deleterious fumes or vapors, thereby endangering the public health, are required to be removed; that gunpowder is allowed to be kept only under certain restrictions; that fish is required to be inspected; and in short, it is on this principle that all laws for securing the public peace and public health are founded, and which legalizes all legislation. So that since the right unquestionably exists, the only remaining question is, Are the evils attending the sale of these agents such as to render legislation necessary? We hold that they are, and, in proof of the position, assert that all other means have failed to keep these most dangerous agents out of the

hands of the wicked and depraved, who use them for the most wicked purposes. If all men were religious or even strictly moral beings, there would be no occasion for such legislation; or if all who sell these agents would voluntarily (supposing the case to be always practicable, which, without legislation it is not) take the precautions advocated, legislation would be unnecessary; but such events are at the present time impossibilities; and since the wicked still exist, and may with facility obtain arsenic, strychnia and corrosive sublimate, the most generally known poisons, and since the possession by them of these substances is dangerous to the public good, is frequently attended with fatal consequences, and, since no means of correcting the evil but by legislation is left, it should be applied.

But it is urged by some, (who sell poisons,) that such an enactment would invade private rights. A man has a right to dispose of his own property as he chooses, say they. We admit it, *where the use of it does not injure his neighbor*. A man may use a stream of water flowing through his land, but he may not avert its course, so that it shall not flow over its former bed on his neighbor's land, nor may he poison the stream so that his neighbor cannot use it. A man may use his ship for the transportation of passengers, but he may not carry so many that the numbers shall breed pestilence or death.

Admitting, however, for the sake of argument, that private right would be invaded, we hold that it is an established principle of law and right, that where private interest conflicts with the interest of the community, the former should be made subservient to the latter. But we maintain that it would invade no right. We do not propose that the sale of these agents be confined to those to whom properly they ought to be, viz: apothecaries and physicians, but simply that *all* who *do* sell them shall conform to a law which is intended to guard the public against their misuse, and will at the same time relieve the seller of all blame in case they should by any possibility be improperly appropriated. An enactment of this

character should, we think, meet the approval and encouragement of all good citizens, but especially of all well disposed physicians and apothecaries.

The American pharmaceutical association has, during the three years of its existence, been laboring assiduously for the accomplishment of this measure, and at its last meeting a committee was appointed to draft a law to regulate the sale of arsenic, &c. and if approved by the association, in September next, it will be recommended to the several state legislatures for adoption.

It is greatly to be hoped, that at the coming session of the legislature a law will be passed to remedy the great evils now attending their unlimited sale in this state. We have already a law providing for the punishment of persons guilty of poisoning; and surely it must be more important to *prevent* than to punish the crime. It is much better and wiser to *prevent* murder than to punish the murderer.

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THE two following communications have been called forth by the reply of Prof. Wellford, published in our July number. These gentlemen can now conduct their controversy after their own manner. The Stethoscope will in future (if permitted to do so) maintain that position in relation to it, which it always desires to occupy towards controversies conducted through its columns, viz: an armed neutrality.

When this journal desires to speak of men or things, it will do so under its own appropriate head, and in no equivocal language. It must be expected to strike when trodden upon.

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*For the Stethoscope.*

"I did but prompt the aged to quit their clogs  
By the known rules of ancient liberty,  
When straight a barbarous noise environs me."

Notwithstanding the fact that the Stethoscope has handled Professor Wellford in a masterly manner, (the reply

being so strong and complete, that the Professor's friends say that "*seven men* must have written it,") sustaining all the positions assumed by Æquus, as well as exhibiting all the quirks and quilllets of this redoubtable knight of the goose quill, to shift and shirk all the facts and points at issue; although it has thrown around him a network of logic from which he cannot escape, even if aided by the teeth of his little mouse Powhatan, still I have somewhat against it for taking this controversy out of my hands, (for I have no desire to waive the responsibility.) And the only circumstances which induce me to pardon having done so, are the violent assault made upon the Stethoscope, over my shoulders, and the able manner in which it has sustained the positions of Æquus. But surely it could have trusted me to answer even *this mighty man*, when, according to his own showing, and notwithstanding my "execrable literature," the "folly of my positions," my "twaddle" and "nonsense," two or three short paragraphs (in all not amounting to a page) demanded in answer twenty-three pages of his best efforts!!

Although the Stethoscope has rendered the office of answering the professor a sinecure, yet as he finds the Stethoscope such an "amusing journal" and the communications of Æquus particularly entertaining in this respect, I must be permitted to gratify the professor once more.

Though if his reply to Æquus is a display of his merriment, what would be an exhibition of his wrath—for it is

"More peevish, cross and splenetic  
Than dog distract or monkey sick."

But as he likes this bouting, though "floored in the first round," why I can afford to keep my good humor and the gloves on, and give him another round.

First, then, the professor says:

"If one so skilled in strategy will excuse me for offering a suggestion, I would beg leave to recommend for his perusal a certain fable, which I believe has been occasionally referred to, the most prominent characters in which are a monkey, a

cat and some chestnuts in the act of being roasted. When he has studied this apologue with sufficient care, he may be able to make the application to the subject in hand without further assistance from me."

It does not require much care or study to make the application of this apologue to the subject in hand. It required but a glance to catch the professor's idea.

He himself occupies the position of the first named among the dramatis personæ.

His inconsistencies, with regard to medical reform, are the chestnuts roasting in the fire of public opinion, while he is endeavoring to pull them out through the political press, with his cat's paw Powhatan. This, we are sure, will be admitted by all commentators to be an appropriate rendering of the text before us.

Having disposed of the professor's apologue, according to his desire, we proceed to take up his first quotation from *Æquus*, which he could not understand, and which he regarded with so much "awe and apprehension."

"Now, let us see what evidence of the good seed sown, the address of Dr. Wellford affords," was what *Æquus* wrote, as the manuscript will show. The printer inserted an "*in*" through which the professor tries to get out. *Æquus* never saw the proof of his article, and hence could not correct it. Our critic is more particular. He not only sees the proof of his own articles, but attempts, even after repeated refusals, to procure other people's too. (So at least we are informed.)

Although we believe the professor does not enjoy the reputation for much penetration or great erudition, but only for

"Much specious lore but little understood;  
Veneering oft outshines the solid wood.  
His solid sense by inches you must tell,  
But mete his cunning by the old Scot's ell."

Yet we think that *even he* could have gotten at the meaning of this sentence, notwithstanding the redundant preposition, had not this precious little "*in*" afforded him a bush to dodge under.

Nor is it wonderful that this sentence should have filled him with "*awe and apprehension*," foreshadowing as it did an exhibit of his own inconsistencies.

Aye, he did not wish to understand it. This is a convenient manner he has of controverting facts. A broken metaphor or a typographical error, in his extremity, becomes to him a rock of defense and a tower of refuge. And hence his skill at finding fault.

"Profound in all the nominal  
And in sly ways beyond them all,  
And with as delicate a hand  
Can twist as tough a rope of sand;  
And weave fine cobwebs fit for skull  
That's empty when the moon is full."

Instead of denying or disproving my statements, (to use the professor's own elegant diction,) he "proceeds to pitch into my motives."

Hear what he says:

"Will it be believed that a disinterested anxiety for the advancement of medical reform was his impelling motive?" "He will excuse me for believing farther, that it is precisely because he 'believes the *practical* application' of his reform 'would be ruinous to the medical schools' that he so warmly advocates its adoption. '*Timco Danaos et dona ferentes*.' Any reform which he or his colleagues may propose, will be, as it ought to be, carefully considered before it is adopted."

In reply, I ask, What other than a disinterested motive could Æquus have? He has no private grudge against the professor or the schools. He could have none. He is no disappointed aspirant for a chair in any school. And the only position which he has ever sought, which he did not obtain, was that of hospital assistant. What interest could he have in destroying the medical schools, even if he had the power? There would be no chance for Æquus to get a place under a new regime, for the professor says that Æquus could not even pass his examination; and if this be true, how utterly disqualified would he be to occupy a chair in an insti-

tution where the standard of medical education would be of so much higher grade than it is at present!

But we heartily endorse the sentiment of the professor when he says that any reforms that I or my colleagues may propose, should be carefully considered before they are adopted.

*We* wish nothing done in a corner. *We* have ever held these schemes up to the light, and Dr. Wellford once assisted us. But on which side is the professor? Just now deprecating reform measures, sounding the tocsin of alarm; but now hear him, hot and cold, with the same breath:

"Insinuations, or rather assertions of this description, are slanders on the institution, its faculty and visitors. It is *not* opposed to reform, but has done and is doing all in its power to promote the legitimate objects of its foundation."

The school not opposed to medical reform? We are glad to hear it. Does the professor fear that medical reform is becoming a *popular* measure?

Is he between two fires, that

"Reform he one way disavows,  
The other, nothing else allows?"

But where is "all that has been done and is still doing?" Do not let it remain hidden under "confidential relations," but let us have it brought to the light.

Perhaps the professor considers his own appointment in the school the fruition of one of these great measures of reform; "one of the legitimate objects of its foundation."

Dr. Wellford once believed that an untrammelled independent board of trustees was a desirable measure of medical reform. But now "*nous avons changé tout cela.*"

A secret arrangement with a faculty previous to an election by a board of visitors, a fixed salary of \$1,500, (whether the fees amount to that sum or not,) and after the whole matter is fixed and determined, an advertisement for candidates for the vacant chair—this is one step of progress in medical reform, at least

“ Brutus says so,  
And Brutus is an honorable man.”

But the professor might have saved himself all the ills and pain of his late pregnancy and labor, and the subsequent disappointment of those who learned that the mountain was about to bring forth; for as he says “the insinuations of Æquus were slanders upon the institution; they will only act as a foil to set forth the beauty and effulgence of this jewel.” Being false, they cannot possibly ever injure the medical school of Virginia, but can only recoil upon the slanderer. But let him show their falsity.

In speaking of the college of Virginia, the professor says he is happy to observe that it has been discovered that the session has been lengthened a few weeks. But to use his own words:

“This ‘grand result’ does not appear to have been ascertained by the Stethoscope so late as its December number, although it had been announced for months previously.”

Now, this assertion, which the professor makes, that any announcement had been made that the college session had been lengthened, I most *positively deny*, and I challenge the professor to produce any such announcement. How could the readers or editors of the Stethoscope ascertain the fact? for the advertisement of the college sent the Stethoscope, contained no such statement. And the readers and editors of that paper “have not the advantage of enjoying confidential relations” with Dr. Wellford! I have examined a number of the advertisements of the first annual course of lectures of the medical college of Virginia, and none of them contain anything about the length of the session. It was only an inference of Æquus, who was desirous of giving the college all the credit for every improvement it deserved or could possibly claim, although I had heard it hinted that such advertisements were only gill nets to catch the early shad, and always left a hole to creep out at, by not naming the termination of the session.

The following is all that the college advertisement says about the length of the session :

“ The first annual course of lectures of this institution will commence on Monday, the ninth of October 1854, at the college building, corner of Marshall and college streets.”

It is a new doctrine, (and one, we think, that will find but few advocates,) that because I am opposed to the administration of a government, I am necessarily opposed to the government itself, or that because I am opposed to a particular form of government, I therefore oppose all government, or am of necessity an anarchist.

Because I do not approve of all the acts and schemes of the “ president and his cabinet,” believing that they may be influenced by improper motives, seeking their own aggrandizement more than the public good, it is not a necessary sequence that I am opposed to a republican form of government.

Yet, whenever the subject of medical reform is broached, or the evils of our present system of education alluded to, or the inconsistencies in the courses of our professors brought to view, immediately the cry is raised that we are opposed to the medical school of Virginia, and wish to destroy it.

It is most true that I do not wish to see it flourish as the professor does, but I do wish to see it prosper, and take a higher stand than any college in the Union.

I wish to see it an ornament and an honor to the Old Dominion. Instead of attempting to pull it down, we have ever done what we could to show how this institution might be built up and made to flourish, believing as we do that the measures best adapted to promote its prosperity, are those recommended by the American medical association, the medical society of Virginia, and *formerly* urged by Dr. Wellford.

The high stand that the University of Virginia took when it was instituted, did not drive off all students to the other colleges, but on the contrary it is a notable fact, that the other colleges of Virginia were obliged to raise their standard of

requirements to retain their students. This has neither destroyed them nor the university, but on the contrary, they have all prospered in the direct ratio of their requirements.

But when these advances are now proposed and urged for the medical schools, Professor Wellford raises the cry of persecution, and impugns the motives of those who now advocate the measures which he assisted in originating.

“On either side he can dispute,  
Confute, change hands, and still confute.”

But it is not very strange to find Professor Wellford ready “to hear and to tell some new thing,” or “setting forth” any doctrine, however quixotic or outre.

He has ever been one of the most *docile disciples* of all the humbugs and tom fooleries to which the north has given birth, which

“Some call *gifts* and some *new lights*,  
Those liberal arts that cost no pains  
Of study, industry or brains.”

Such as phrenology, mesmerism, table turning—and shall I add, know nothingism?

Does the professor’s sub speak for him? Powhatan says:

“I make no pretensions to proficiency in any of the new lights of science, (falsely so called,) struck out from the isms of the progressive age, to confound the reason and common sense, and disgust the common honesty and patriotism of every candid and sober minded man!!”

I had thought that when he spoke of isms, know nothingism was the one alluded to; but when he found that shaft did but wound his general and staff in the rebound, he is straightway filled with astonishment that any one should have thought he was alluding to know nothingism.

Then, what other new lights of science, falsely so called, could be hinted at but those in which his master is an adept?

Verily, the professor has reason to say, “Save me from my friends,” for Powhatan has run him into a strait in which he

has Scylla on one side and Charybdis on the other. He is in a fix somewhat like those who were asked from whence John's baptism came. On the one hand, if he admits the know nothingism, he fears the people. On the other hand, if he pleads guilty to the humbugs, he becomes execrably ridiculous, and renders himself a laughing-stock for every sane and sensible man.

Which horn of the dilemma will the professor take?

But to return from this digression. The professor says that any reforms I or my colleagues propose should be well considered before they are adopted, because we are trying to destroy the medical college of Virginia.

Then, was Dr. Wellford trying to destroy this institution when he advocated the same schemes? And was the professorship the hush money that stopped his mouth? And is this the reason why he thinks others, who advocate medical reform, are engaged in the same destructive work?

Herein we see a reason why he is unable to ascribe disinterested motives to those now engaged in efforts for medical reform, and are able to account for the manner in which he formerly "pitched into" the medical schools.

Hear him, ye college men :

"But, however imperfect the preliminary education of the medical student, it cannot well be more superficial than his subsequent medical course."

"It is painful to remark, that among the forty schools, there are many which are mere trading concerns, established from sordid motive, and continued without those lofty aspirations for reputation and usefulness which make 'ambition virtue.' But though powerless for good, such institutions are potent for mischief."

In speaking of a medical student's course at college, he says :

"He purchases the tickets which will admit him to the lecture rooms of his professors, but whether he avails himself or not of the privilege they are intended to confer, is an affair regulated exclusively by his own inclinations."

"No test of his attendance or his progress is demanded, no faithful nor rigid study is exacted, no examinations are instituted, no recitations required. He may dissect if he choose to do so, but if he does not, he may let it alone, as in many of the schools a knowledge of anatomy thus acquired is not made necessary to obtain a degree. Nor is clinical instruction made obligatory—some of the colleges have no hospital under their control, others substitute a weekly clinique, and others disregard the subject altogether."

"But if a practical knowledge of anatomy and clinical information are not conditions precedent to the honors of the doctorate, attendance on two courses of lectures is—or rather the possession of two sets of tickets; for if a *soi disant* student is so inclined, he need not actually attend lectures at all, because no evidence whatever is required that he has done so, but the possession of his tickets entitles him to claim his examination for a degree at the close of the second course of four months' lectures as a matter of right."

And again :

"But whatever be the cause, the fact is unquestionable, that entire incompetency is not always a bar to the attainment of the diploma. Of this fact, if it were not one of common notoriety, the records of the army and navy boards afford conclusive evidence."

"Our single examination, which does not even disclose our ignorance of the boiling and freezing points of water."

"There was a time when some little talent and attainment were considered necessary for high political office or a position in either of the learned professions, but now "*nous avons changé tout cela.*"

"It is a deplorable truth, that many inherit from their alma mater more of cunning and stratagem than of professional skill."

Cunning and stratagem?

"I thank thee, Jew, for teaching me that word"—yes, if but that one word *cunning*.

We might still go on and give line upon line and precept upon precept from this former apostle of medical reform, but these extracts are sufficient to show what he formerly believed.

We wonder if he still thinks the schools such sinks of in-

iquity, and is still trying to destroy them. One would be led to believe so by the "terrible thrust under the fifth rib" which he gives the medical school of Virginia.

He says :

"It will, I trust and believe, continue to live and flourish like a green bay tree, in despite of the puerile efforts for its destruction of *Æquus* and his allies."

Is the professor in earnest? Is this the prosperity he wishes it? "And yet it is hard to believe that the amiable and kind hearted professor could have intended so serious a wound. Perhaps he only meant a little fun, and designed to perpetrate, with the most innocent simplicity imaginable, one of those *cunning* hits which persons of a certain sort of talent like the *professor and Powhatan* enjoy so much and know so well how to administer; so sly and yet so cutting. Entertaining as it is, however, I must beg the professor, if it is *the same thing to him*, the next time he wishes to amuse himself in castigating the medical college of Virginia, to select his quotations from some work with whose *literature* as well as spirit he is more familiar.

Just let me explain to this savañ his unfortunate choice of a simile when he would express his interest in the prosperity of the Virginia school, by wishing it to flourish like a green bay tree :

"I have seen the wicked in great power, and spreading himself abroad like a green bay tree. Yet he passed away, and lo! he was not. Yea, I sought him, but he could not be found."

Can we believe that the amiable and innocent professor wishes this to be the brief history of the college which he now so brilliantly adorns?

Did he not rather mean to use that Scripture, which to illustrate the stability and increasing glory of the righteous, speaks of them as "trees planted by the rivers of waters?"

We cannot help warning the unsuspecting professor, (in

passing,) that meddling with the black arts, "mesmerism," "table turning," and the like, is apt to produce obliquity of the holy and antagonistic Word from which he borrows his simile.

Is this little error of the guileless professor a sad token of the impending offuscation of intellect which is sometimes the consequence of tampering with these "new lights of science," *falsely so called*.

But if our quondam reformer really wishes the prosperity of the school, he is not taking the most direct method to effect it. Abusing Æquus and the editors of the Stethoscope will not make it a great school, nor even the destruction of that paper. Appropriations by the legislature will not do. Money will not make it a great school, nor can even the connection with the school of our oily professor make it great. *It must first have the confidence of the medical profession*; and this can only be gained by carrying into practical effect those measures of reform which were once so beautiful and necessary in Dr. Wellford's eyes.

But I must proceed with my dissection of the professor and his inconsistencies—and for the present moment I shall confine myself to some of the inconsistencies in what he *says*. Presently I shall apply the touchstone to what he *does*. And I should be glad if he would now make his choice whether he will be judged by what he *says* or by what he *does*. But hear him. The professor says:

"If one so skilled in strategy will excuse me for offering a suggestion."

And again:

"The instruction afforded me by this wise remark may be of service to me on some future occasion."

How do these passages comport with the following:

"I do not know who Æquus is—nor do I care to know."

There was no strategy displayed in the first communication of *Æquus*. It was a direct, straight forward statement of facts. The professor says it was nonsense, twaddle, and "remarkable only for its execrable literature, the impotence of its malice, and folly of its positions."

According to the professor himself, there was no strategy. Then, if he does not know who *Æquus* is, *how does he know he is so skilled in strategy?* And how could he use this wise remark, by which he will judge *Æquus*, (as is the intimation,) if he did not know or care to know who *Æquus* was!

"Verily, under such circumstances, judging a man by what he says would lead to very inaccurate conclusions."

But this individual, "pursuing the even tenor of his way, quietly and unobtrusively, a stranger in this community, with a limited acquaintance," &c. in most doleful notes, complains that *Æquus* has forced him into public view, and that he has placed him in a false position before his medical brethren!! "Cool, decidedly!" "I like that"—"It is a capital hit, neatly executed." Our quondam knight errant is decidedly opposed to being brought into public view!

But this is a newborn modesty generated since he became a professor. Did *Æquus* drag him into public view when he lectured the Fredericksburg people on phrenology—"that new light of science, falsely so called," or when he lectured the medical society of Virginia, or when he addressed the legislature. And not satisfied with being forced into public view at home, did *Æquus* cause him to don Mambrino's helmet, and to sally out to set the world to rights? Did *Æquus* force him to accept a professorship in a state institution? Did *Æquus* beg him, for God's sake, to come and save the institution?

With the private individual Dr. Wellford, pursuing the even, or uneven tenor of his way, *Æquus* had nothing to do, but with Professor Wellford, an officer in a state institution, *Æquus* has the liberty to criticise, and will exercise it when-

ever he sees fit. This Æquus did only in regard to the professor's inconsistency on the subject of medical reform. But since the professor hoots at the very idea of such a thing as inconsistency in him, as is evinced in the following extract :

"The inuendo contained in this paragraph is, that while I believe medical reform necessary, and that the schools are competent to effect it, yet that since I have been connected with one, I am willing to sacrifice a public good to my individual interest"—

Let us see if this is the only instance in which he has been inconsistent.

But, first, let the following be perfectly understood and established, and it will be seen that the professor *endorses* it, and therefore is entitled to the benefit of the *discount*.

["We are in the habit of judging of men and of associations *more by what they do than by what they say.*"]

"This is undoubtedly sound doctrine, notwithstanding its novelty. The instruction afforded me by this wise remark, may be of service to me on some future occasion. 'I thank thee, Jew, for teaching me that word.'"

This is sound doctrine. Then, this shall be the test or touchstone which we shall presently apply; but hear the professor again :

"When, however, the drawer of an obligation is unknown, or of questionable solvency, the endorser, who gives character and currency to the bill, is the party really responsible, and in a moral point of view more emphatically, if he participate in the benefit of the discount."

"I thank thee, Jew, for teaching me these words."

There is an establishment in Fredericksburg, under the style of Jas. Cook & Co., which is largely engaged in the sale of quack medicines. When Cook's notes are presented

at bank, upon whose responsibility are they discounted? Who gives character, currency and solvency to these bills? A bank director informs me that they are discounted upon the responsibility of Dr. B. R. Wellford.

Who is the party, in a moral point of view, more emphatically responsible? Who participates in the benefit of the discount?

Let it be remembered that the professor says that it is undoubtedly sound doctrine to judge men more by what they *do* than by what they *say*. Now, hear what Professor Wellford *says*, by being a member of the American medical association, for this is an extract from the code of ethics. After mentioning various culpable practices, it says:

“§ 4. Equally derogatory to professional character is it, for a physician to hold a patent for any surgical instrument, or to dispense a secret *nostrum*, whether it be the composition or exclusive property of himself or of others. For if such *nostrum* be of real efficacy, any concealment regarding it is inconsistent with beneficence and professional liberality; and, if mystery alone give it value and importance, such craft implies either disgraceful ignorance or fraudulent avarice. It is also reprehensible for physicians to give certificates attesting the efficacy of patent or secret medicines, or in any way to promote the use of them.”

This code of ethics was also adopted by the medical society of Virginia, of which society our professor is also a member.

Nor is this all. At a meeting of the American medical association, at which Dr. Wellford was present, the following was adopted:

“The arts and perseverance by which these *nostrums* are brought into notice show that they are in the hands of shameless men, having but one object before them, their own aggrandizement. Among the number we regret to say that there are some physicians, who, recreant to the high trust and severe duties of the profession, have chosen this shorter but most dishonorable mode of enriching themselves.”

This is virtually what Professor Wellford says.

But, now let us see what he does: He, the very *pink of medical propriety*! the man who sets himself up to be gazed at! this wonderful prodigy! the apostle of medical reform! the president of associations and societies! the observed of all observers!! the maker of codes of ethics! and the voter for resolutions denouncing quackery! secretly engaged in the sale of quack medicines. And can this be? "O consistency, thou art a jewel!"

But it is even so. Our hero, this professor in the medical college of Virginia, is pecuniarily interested in, aye, in other words, is or has been for years the partner in an establishment which derives a large part of its profits from the sale of quack medicine. "He derives the benefit of the discount," and, according to his own showing, is morally the responsible party. "Out of thine own mouth have I judged thee," and we leave others to see whether the professor's words and ways are in unison.

In conclusion, Professor Wellford complained that my first communication was made under the cover of a fictitious signature, although the real name of the writer would have been given him at any moment if he had called for it. But this course he did not choose to pursue, but rather chose to throw the responsibility upon the Stethoscope. Lest he should say the charge in the above communication is made behind a *nom de plume*, the undersigned gives his name in full, and assures him that he *alone* is responsible for the communication signed Æquus.

RICHMOND A. LEWIS.

**Correction.**

GENTLEMEN—In Dr. Wellford's "unprovoked assault" upon Dr. Wilson, he states that the latter earnestly sought a chair in the medical college of Virginia. This I know to be incorrect. At a meeting of the reform party of the profession in Richmond, Dr. Wilson was nominated to the new board of visitors, without his knowledge or consent; and on the same night, a member of the meeting called upon Dr. Wellford, held a frank and friendly conversation with him in regard to the circumstances and objects of the nomination. If Dr. Wellford will burnish his memory, he may find some record of these facts. Subsequently, when Dr. Wilson was urgently requested by some of the members to permit himself to be put in nomination, he positively declined taking any action in the premises.

But the palliating excuse of a treacherous memory cannot be allowed him, when he charges your New York correspondent with lauding a northern school for lengthening its term of instruction to five months, while no notice was taken of "the same identical reform adopted by the medical college of Virginia;" for he had the letter before him and made extracts from it at the very time he made the charge. He must have presumed upon the improbability of any of your readers turning to that letter to verify his assertion. It is true, that the extension of the regular course to five months was barely alluded to, but the chief reforms of the New York college of physicians, and surgeons of which approbation was expressed, were\* its courtesy in inviting one of the medical societies to hold its meetings in one of the college halls free of expense, thus cultivating a friendly intercourse with the profession, and extending the annual term of instruction to ten months, by the addition of a five months' course, for which no fees were charged.

Why Dr. Wellford preferred suppressing these chief sub-

\* See *Stethoscope* for December 1854.

jects of commendation, when instituting a comparison between the New York school and that of Richmond, will be readily understood by every reader of the *Stethoscope* in Richmond.

But Dr. Wellford is not content with misrepresentation by a *suppressio veri*, but he must try to do further injury to your correspondent, by holding him up to popular odium as tainted with northern principles. When, let me ask, did Dr. Wellford become such a champion for southern medical institutions? Was there no medical college in Virginia when he "earnestly sought" an appointment in a northern school, where he was to be used as an attraction, a bait for Virginia students? Was there no medical college in Virginia when he sent his sons to a northern medical school? Did his southern principles undergo a regeneration at the time of his professorial inauguration?

When the professor occupies high stations, and treats with intense superciliousness those who dare to criticise his public acts, complaining of their disturbing his modest quietude, and in retaliation, assaults others who were at peace with him—as he is fond of jokes and stories, let me tell him one of a sailor who was arrested for beating his wife. "You ought not to strike her (said the magistrate) for she is the weaker vessel." "Then hang her (retorted Jack) she ought not to carry so much sail."

JAMES BOLTON, M. D.

*To the Editors of the Stethoscope.*

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EDITORIAL.

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"I shall say but little of the legislative duties of the association. I shall say nothing of the propriety or impropriety of getting laws passed to regulate the practice of medicine, and furnish standards for candidates for the doctorate. Perhaps the association can do but little in this respect. Ours is a popular government, and the people are disposed to allow the largest freedom in everything pertaining to medicine, medical schools, and physicians. Laws passed against quackery one year, are revoked the next. Our country is the paradise of quacks. All good things have their attendant evils, and this unbridled liberty is one of the evils of a popular government. May we not hope, however, that even this evil may disappear, as general education and the cultivation of the masses advance? At any rate the people are not yet disposed to put down the quacks, nor to require too high a degree of qualification for those of the regular profession."

THE above is an extract from the address of Prof. Pope, president of the national medical association, which was recently convened in Philadelphia. Brief as it is, it contains the germs of many thoughts, and is suggestive of a wide range of discussion.

We select it as a text, that we may express most emphatically our dissent to the line of policy foreshadowed as the speaker's view of the duty devolved upon medical men of the present age.

We are told "that the people are not yet disposed to put down the quacks, nor to require too high a degree of qualification for those of the regular profession; that the people are disposed to allow the largest freedom in everything pertaining to medicine, medical schools and physicians; and that our country is the paradise of quacks."

We admit, and with Prof. Pope deplore the existence of these evils.

But in view of the picture which he has not overdrawn, we have not been able to bring ourselves to that state of pious resignation which determined him to "speak but little of the legislative duties of the association," and that little discouraging to the "propriety of getting laws passed to regulate the practice of medicine, and to furnish standards for candidates for the doctorate."

We say we cannot reconcile to ourselves or to our views of duty, this policy of dignified submission—of leaving matters just as they are—even although these evils *may seem* to result from "the unbridled liberty of our popular government," and although the reconciling and consolatory reflection is held out to us, "that all good things have their attendant evils."

We regret that such sentiments should have escaped the lips of the president of the American medical association—a body whose whole record proves that the abatement of these evils, by other means than patient waiting for the "cultivation of the masses," was viewed by its founders as "its original and grand finality."

We maintain that provision for the public health is one of the most sacred duties of municipal law. In a government like ours—a government of constitutions and laws—as contradistinguished from one of "unbridled liberty" and license—it is clearly within the province of legislation to throw the ægis of its protection around the most valued interests of its citizens.

We maintain then as good citizens, it is the duty of medical men, and more especially of a national organization, to procure and so shape the legislation of the country as will best promote the general welfare, and further the interests of science. Commerce, the arts, agriculture, public morals, are the subject of legislative control and statutory provision.

In respect to these, the rights and conduct of individuals are defined and limited, and the general welfare sought to be secured by proper safeguards.

In the more important matters which concern the health and lives of the people, we would ask why it is deemed an infringement upon popular liberty to procure such enactments as will secure against the dangers of ignorance and the wickedness of individual cupidity.

We demur to the proposition, that because ours is a popular government, it is proper to "allow the largest freedom in everything pertaining to medicine."

We propose to instance a few particulars pertaining directly to medicine and the duties of medical men, which call loudly for the active interposition of state legislation—calls not uttered by the *craft for its protection*, as demagogues constantly insinuate, but by the stern demands of the public good and the ends of public justice and safety.

In our state, our registration act, properly deemed of so much importance as to have been secured by constitutional provision, is a dead letter upon our statute book, for the want of practical legislation. We need not dwell upon its importance, or of the duties of physicians in relation thereto, in working out the great problems of vital statistics and public hygiene.

Again: The details of our system of coroners' courts are so defective as often to thwart the ends of public justice. This is the case with our code generally, where medico-legal questions are involved.

The sale of drugs and medicinal agents is another subject which calls loudly for legislative restriction. We invite attention to the communication on this subject of Mr. Joseph Laidley, an accomplished pharmacist of this city. The facility with which the most virulent poisons are obtained, and the frequency with which they are resorted to for criminal purposes, should excite the apprehensions of all. Within a month past, we have had applications from different sections of the state, to make chemical analyses in cases of poisoning. Arsenic was detected in several of these, in which it was mysteriously procured and administered by slaves.

In another case of attempt at poisoning, which has just

come to our knowledge, a vial of strychnine was found in the possession of a trusted servant.

If dealers in these articles are not restricted from careless and indiscriminate sale—if itinerant traffickers in quack nostrums are to luxuriate in unbridled liberty—who, we would ask, is safe from the dire consequences of carelessness on the one hand, or of wickedness and avarice on the other.

A vial of strychnine may become a potent weapon in the hands of the enemies of our peculiar institutions.

In other countries, the most rigid laws are enforced, regulating the sale of these agents—laws which render such criminal attempts comparatively infrequent, or are almost sure to lead to detection.

The particular legislation, or modification of legislation, which should be interposed, is the subject for wise deliberation. Medical men, individually and collectively, being presumed to be experts in these matters, are particularly expected to contribute the results of their reflection, and the active exertion of their influence.

But if there is really any necessity for legislation on these subjects, (and we presume there are many who admit it,) if it is proper in our “popular government,” by constitutional and legislative enactments, to secure such data as are necessary for the solution of a great problem—if the safety of the citizen demands that medical experts should sit in judgment in cases involving medico-legal knowledge—if it is legitimate and proper to guard and restrict the sale of poisons—especially now that the fires of modern chemistry have penetrated the laboratory of nature—and reduced the latter to their proximate principles of virulence—how much more imperatively is it the duty and within the province of legislation to provide that competent men shall solve the problem—that *real experts* shall sit in judgment—and that none but such as give evidence of skill and qualification for the high trust, shall undertake to handle these subtle agents.

So far from agreeing with the sentiments of the text, at the head of our article, we believe it is the highest duty of the

association to exert all of its legislative powers and all of its influence to the very end of "getting laws passed to regulate the practice of medicine, and furnish standards for candidates for the doctorate."

Medical education is worthy the fostering care of government, and should be sustained by its bounties. We would vote the public treasure for its encouragement. But, then, let the beneficent designs of government be realized. Let the act of appropriation carry with it, beyond peradventure, such provisions as will secure thorough mental discipline and such courses of instruction as are adequate to the demands of science and the important interests involved. *This is a different thing from voting a trading capital to a corporation desiring to drive a thrifty trade* in the business of manufacturing doctors.

But this opens to our view the whole subject of medical schools, and the duties of legislation in reference to them.

We reserve this branch of the subject for future discussion. But we cannot forbear remarking that it is high time that medical teaching should cease to be regarded as the legitimate subject of unrestrained individual enterprise, subject to all the laws of other trades and all the short cuts of other traffics.

Medical men should keep a vigilant eye on medical schools, and hold them to a rigid accountability.

Prof. Ware of Boston having recently paid a visit to the medical institutions on the continent, concludes an eloquent address on the festive occasion of the anniversary of the Massachusetts medical society, with a sentiment which we doubt not will be heartily responded to by some of our readers. He says:

"If, Mr. Chairman, there is one thing more than another, the duty of our association, it is to watch with most jealous care the gates through which men are permitted to enter our ranks. I have seen and suffered no little annoyance in my recent experience, from the passport system, as practiced abroad, and have no reason to speak of it with particular favor—but at *our* gates I would have it enforced with as much rigor as by the most despotic of sovereigns. For this our duty to ourselves, and still more our duty to that public,

whose servants we are, loudly calls, and in connection with these remarks let me conclude by proposing the following sentiment:

"The fellows of this society—The legitimate guardians of the education, the interests, and the honor of the physicians of Massachusetts."

We have now ventured to allude to a few subjects which appear to us to require judicious legislation. We hope our remarks may at least serve to call attention to them. We cannot felicitate ourselves on any other result than that our views will meet with opposition. This will come from different quarters, and from different motives.

The whole army of quacks will be down upon us for having touched a discordant note in their paradise. These will be reinforced by a large class who are always satisfied with things as they are—the sweet sons of indolence—who dwell in Sleepy hollow.

But there is another class of opponents who defer to the will of the *people*. They are not sure that the *people* want any change. They would have no objection to some legislation *on some points*. But when this ball is put in motion, can't it be stopped before it *reaches other points*? Ah, "there is the rub!" And this class is persuaded that these matters had better be left to *themselves*, and to the enlightened control of a discriminating public sentiment.

We say we expect opposition to our views from these allied forces. Perhaps we shall hear the cry—Radicalism! Sacrilegious hands on our "cherished institutions!" Vandal assaults on our newly dressed code!

But in spite of these deadly missiles, we expect to survive, and "to possess our souls in peace"—pursuing the even tenor of our way. Nay, more. We feel encouraged—for when we find certain influences against us, we are sure we are right.

We shall even hope to see some useful and liberal legislation for medicine and medical education, even here in old Virginia, unless indeed it should be discovered to be in conflict with the resolutions of '98-'99.

As the state advances in the development of its physical resources, and increase of the elements of material wealth, let the same agencies be brought to bear—the same specific legislation for educational interests—elementary, scientific and professional.

Without diminishing the amount of usual matter, we shall continue to discuss these questions of medical politics. We wish to trace certain evils (erroneously attributed to the genius of our “popular government”) to their true sources. We have not the presumption to hope to influence *existing dignities*—but we appeal from our Cæsars to the unbiased tribunal of the medical corps of the state.

Our efforts may be abortive—but they shall not be so from want of an affirmative will or decision of character.

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## SELECTED ARTICLES.

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### PRACTICAL MEDICINE.

PULMONARY LESION TREATED AS AN EVENT ARISING IN THE PROGRESS OF CONSTITUTIONAL DECLINE UNDER THE TUBERCULAR DIATHESIS—By J. P. Hall, M. D. Glasgow, Ky. The topics with which I design more especially to deal have reference to the events to which tubercular, as distinguished from strumous diathesis, gives rise; but, under the conviction that there is here implied a distinction when there does not exist any essential difference, I will occupy a brief space in explanation of my peculiar views. But I must content myself with a bare statement of conclusions, without adducing the reasoning by which my position is supported.

To state that the habit or diathesis resulting in the elimination and deposition of cacoplastic and aplastic products—establishing pulmonary phthisis in one case, in another scrofula, and in a third tabes mesenterica or cachexia Africana—is identical, would be assuming grounds no broader than could be sustained by well established facts, as I verily believe; yet such a view would seem to require qualification.

The above enumerated morbid states clearly present diversified pathological features, and have accordingly been arranged into nosological varieties; nevertheless, I regard them as the offspring of a common progenitor. The features by which the individuals are ultimately so easily distinguishable, are the result of, and determined by predisposition, temperament, manner of life, &c. The prevailing diathesis or dyscrasia constitutes a general disposition to disease, which the local manifestation or the peculiar tissue which may become the seat of structural lesion, in the progress of constitutional disorder, indicates the proximate pathological distinction.

From the remotest dawnings of medical philosophy up to the period when theories are shaped by the teachings of men of our own day, struma, phthisis, and other allied diseases have been, in some sort, treated of as bearing a certain relation to a pre-existing state of constitutional depravity. Cachectic habit, strumous diathesis, tubercular predisposition, &c. are the designating terms that have been employed, according as the incipient indications were to develop one or another of the definite forms of resultant structural disease.

In all of this there is an inherently distinct and dissimilar morbid element implied, capable of exercising a specific control over the events of disease, independently of constitutional idiosyncrasy. Now, to my mind, the proposition resolves itself into this: that, prior to the development of that assemblage of morbid phenomena, expressive of a local lesion and susceptible of a distinctive appellation, as tubercular consumption, scrofula, &c. there is not a vitiating agent at work endowed with peculiar and intrinsically dissimilar properties, but that diversities inherent in the economy and the peculiar influences brought to bear in the individual instance must essentially determine the specific character of the final disease.

I will now proceed to a consideration of that peculiar perversion of the nutritive functions resulting in tubercular degeneration of the pulmonary structure—regarding the pulmonary implication as merely constituting a prominent event, although usually a fatal event, in the progress of the general morbid actions.

We are not accustomed to witness that group of morbid phenomena, exhibited upon the supervention of material change in the pulmonary structure, constituting true phthisis pulmonalis, developed independently of a prior departure from health; yet, until signs and symptoms have demonstrated the existence of such structural lesion, we are taught not to recognize an instance of absolute disease, but rather a negative condition of health.

The doctrine to which I hold, and upon which I am obstinately inclined to act, is, that the organic implication is only a local event, developed in the progress of a series of general morbid actions, and to subserve a salutary end. But in order correctly to appreciate those laws, to the operation of which the dissolution of tissue is due, they must be studied in connection with phenomena displayed in the processes going forward in the sources which originate organized tissues.

According to the most generally received physiological doctrines, the ultimate structure of the animal tissues consists in minute cell-formations and cell-germs; that these primordial cells and nuclei are capable of reproduction so long as they are supplied from the blood with appropriate organizable materials; the plastic elements of this fluid being resolved into nucleated cells also. When the entire group of organic functions are so perfectly performed as to place the animal body in a thoroughly normal condition, there is a perpetual disintegration and reproduction of cell-structures; while one process of the economy destroys another repairs, so that as long as this state of healthful integrity obtains there can take place no material diminution of the original cell supplies, but any interference to the functions of nutrition must necessarily arrest their production, and, as the process of disintegration is still going forward, the result cannot be otherwise than a rapid waste of tissue.

Hence the primary forms assumed in the processes of developing solid animal tissue are traceable to a sanguiferous source, thereby assigning to the circulating current an instrumentality of such essential importance, that without it vital changes must at once stop, and vital phenomena cease to be displayed. The blood, then, is the universal *pabulum vitæ*, the grand source of formative supply for the fashioning of the epithelium cilia to the formation of those intricate structures whose exercises give rise to the complex phenomena of voluntary motion and thought; while from the same source are drawn materials for continued structural maintenance.

But that the purposes of normal organization be answered, a completely balanced set of machinery is requisite, as well as a due supply of assimilative materials; the latter, by the exercise of the former, to be elaborated and converted into those primary tissues whose aggregation forms a complete organism.

A set of organs otherwise capable of the most complete assimilative integrity, without appropriate organizable elements subjected to their elaborating functions, and the formative process, must prove an abortion, no less than would be the case

on the other hand with a due supply of the materials of nourishment in the absence of functional apparatus adequate to the changes to be consummated in assuming the forms and properties of vital tissue. For an organism, after being placed in circumstances every way conducive to its physiological welfare, to maintain these circumstances implies the exercise of very many vital as well as physical forces; but to particularize minutely would be foreign to my present object.

The conditions essential to the elaboration of a pure current of vital fluid, the changes through which this fluid must pass in view of its adaptation to the physiological wants of the economy and the pathological modifications of which it is susceptible under the multiplicity of morbid influences to which it is exposed, constitute elements of prime interest to an enquiry such as we are engaged with; but opportunity permits me to devote, at present, only a passing remark to some of them.

The component elements of the plastic fluid, by which the several corporeal tissues are traversed, and from which they derive their supplies for growth and renovation, are supposed to exist in such relations as will best fulfill the purposes to be answered in the healthy economy. At a given period in the progress of functional events, this equable and perfect relation no longer subsists between the sanguiferous elements; the fibrinous element ceases to be duly elaborated, as evinced in the impaired tone and inelasticity of the tissues; the abnormally low proportion of red corpuscles gives rise to pallor and other indications of a general state of asthenia.

The rich materials of nutrition formerly abounding in the vital fluid are no longer retained; the cell-germ, which was formerly conveyed to the remote tissue and deposited as the nucleus of a plastic structure, has been replaced by the degraded element, susceptible of no higher organization than the cacoplastic and aplastic product. The ordinary nutritive process has undergone a complete metamorphosis; the plasticity of the blood has degenerated into dyscrasia; and the plastic forces, instead of their wonted compliance with the laws of normal organization, are now addicted to flagrant vices. If we consider how prejudicial to the vital apparatus must be the effects exerted through the blood, thus vitiated, conveying to the remotest recesses of the organism extraneous materials of a highly offensive character, we may readily perceive how absolutely indispensable to the continued operations of the economy is the office to which nature has doomed the lungs, or it may be a less vital organ. The economy sustains not only a negative injury in the arrest of plastic forces growing out of

a deficiency of organizable constituents, but the positive evils resulting from noxious elements present, demand their speedy withdrawal, and the organ or organs evincing the greatest proclivity to participate in the progressive decay, become a receptacle for the effete deposit.

As would, *à priori*, be expected, the great depurating organs, the lungs, seldom fail to become the chief instruments in the process of ridding the system of the excrementitious materials we have described. And if we reflect how vitally dependent upon the integrity of the pulmonary function is the adequate preparation of the blood for the uses which it is destined to serve in the economy, we are at once prepared for the series of perverted actions and torpid functions made manifest. The abnormal elements which give rise to the blood-dyscrasia finding efficient emunctories in the lungs, the vitalizing functions of these organs become impaired in consequence of the impediment offered to respiration by the amorphous deposit, which, by still further depraving the quality of the nutritive current, accelerates the elimination of plastic elements, thereby redoubling the burthen of the emunctories, either disposition reacting upon and aggravating the other, or alternately becoming cause and effect, until the elaborating power is paralyzed and molecular nutrition permanently arrested.

The proximate element of disease is the peculiar constitutional habit characterized as tubercular diathesis, under which the functions of the body are so extensively involved in deviations from their wonted exercise in health, consists in the transformation of plastic blood into a fluid not only notably deficient in organizable constituents, but prone to the elimination of products in the highest degree embarrassing to the operations of the vital apparatus. Those materials so essential to the maintenance of a perpetually changing mechanism are not merely withheld, but the blood has become the medium of bringing into contact with the delicate tissues ingredients directly subversive of physiological relations, and capable of effecting the dissolution of existing tissues. Such organ as may predominate in selective affinity for the degraded element becomes a scavenger for the depraved circulation, affording a receptacle of deposit for the eliminated tuberculous matter.

Although it may seem a melancholy alternative, yet the organic lesion is an event of absolute necessity; an event salutary in its design, but direful in its consequences. In the progress of pre-existing constitutional malady there has been created an office, associated with which are duties the per-

formance of which involves the self-sacrifice of whatever organ assumes them, yet they must be performed, else speedier and more certainly fatal results ensue. Should this fatal service have been assumed by the pulmonary organs, as by far most frequently happens, upon the lapse of a period of uncertain duration, the function of these organs becomes manifestly impeded; the work so extensively involving the welfare of the body, even its existence, ceases to be adequately performed; efforts are now provoked for the expulsion of the accumulating burthen, and it is expelled; but alas! the source from whence the deposit is supplied yields with continually increasing lavishness. The *materies morbi*, which could not, with impunity, be retained, diffused throughout the circulating current, must prove a canker to the reservoir upon which it is concentrated; and at last nature's provision, which for a time held forth the promise of protective relief at least, becomes impotent; the lungs decay; the vital fabric, attenuated and exhausted, succumbs.

Thus it is that the hand, so gently laid on at first, gradually and insidiously but firmly tightens its grasp until the victim is completely crushed.

The morbid alterations which have been but imperfectly traced, clearly originate in a lesion of nutrition; but this lesion does not, in every instance, by far, lead to the development of the event which entitles the morbid state to the denomination of tubercular consumption. But if the incipient tendency does progress to the establishment of the event, or pulmonary lesion, we may uniformly, by retracing the steps by which disease has advanced, convict the nutritive system of delinquencies, bearing, to the *event*, the relation of primary cause. Not a single essential morbid change arising in the progress of the original diathesis could have been developed independently of this relation. No process of argumentation could demonstrate to my mind that a tubercle was ever formed independently of a prior state of disease.

A tubercle is an eliminated morbid product, and must of necessity be the result of a morbid action engendered by a still further antecedent diseased impulse.

Having already extended this communication beyond the limits originally contemplated, I will conclude by offering a few very general reflections as to therapeutical relations.

The first indication is to remove the constitutional disease, or rather correct the diathesis; thereby averting the untoward event which its final progress involves, namely, organic lesion of the respiratory apparatus. If this event should not have been forestalled, the second step indicated is still to reclaim

the constitution from original vices as an absolute condition to the permanent arrest and repair of organic lesion.

The engrossing idea of structural lesion must give place to more extended principles of investigation, else therapeutical deductions arrived at can only serve to alleviate and retard, while the problem of restoration must remain unsolved in reference to the ravages of tubercle.

Remedial systems must be predicated upon a broader basis than is afforded by stethoscopic disclosures. So far as regards a strictly pathological diagnosis, no one has a higher appreciation of the utility of this instrument than myself; but when the diagnosis sought is one from which wholesome, sound, therapeutical deductions are to be drawn, its value rapidly degenerates into inutility. The doctrine that I hold, and which I would inculcate, is, that the disease designated pulmonary phthisis does not originate in the pulmonary structure; that the structural lesion here is an event rendered inevitable in the progress of a pre-existing morbid habit; and that no process of exploration, it matters not with what degree of accuracy the condition of the lungs may be revealed, if thus restricted, can materially aid in supplying data for efficient remedial procedure. In this I would not be understood to intimate that the state of the lungs should be unheeded, or that this accurate method of determining what that state is must be discarded; yet such information, for the most part, only enables us to estimate the gravity and general import of the case, while an expansive field beyond must be scrutinizingly traversed for such discoveries as can be made available to the aims of salutary treatment.

Therapeutical measures must be shaped with the fact constantly in view, that the structural lesion is a consecutive event, and that the indications to be fulfilled are derived, not from the manifestation of a single organ upon which stress has incidentally fallen in the progress of a more general pre-existing functional lesion, but the expressions of a morbid organism constitute the indications to be sought and obeyed. The process of organization begins with the cytoblast, and here it is that the first link is wrought in the chain of morbid events, displayed in the progress of those functional and organic changes which mark the stages of tubercular consumption from the incipient diathesis to the period of its latest ravages.

There is probably no other disease, the history of which furnishes a commentary upon medical art, more justly humbling to the pride of its votaries than the one under consideration. No lengthened argument, no array of authentic

testimony, is wanting to substantiate the assertion that the present state of our science affords no resources worthy to rank as remedies in the armory of therapeutical weapons.

The most judiciously ordered remedial systems which science, wisdom and experience have been capable of devising, have most signally failed in conferring upon the melancholy victim of consumption the welcome boons which it is the mission of the healing art to bestow. When we remember that this insufficiency of our art leaves to an undisturbed progress a relentless monster whose ravages so fearfully contribute to abbreviate the span of human existence, we cannot, as members of an enlightened and philanthropic profession, fail to be impressed with the exalted nature of every effort, the tendency of which is to advance us a step in the pathway of useful discovery. The enquiry is a noble one, and will conduct the enquirer to a fertile field; but he must go forth prepared to break the surface.

This article has unavoidably partaken of a discursive character; many highly interesting details have been altogether omitted, and those noticed have been introduced regardless of system or order; but if the line of enquiry which I have attempted to indicate has been made obvious, more especially if the claims which I am persuaded should be allowed it have been in the least advanced, my main object has been achieved: for I verily believe, and willingly commit to record the opinion, that if in the progress of medical discovery, the great desideratum—the successful treatment of tubercular consumption—which has so long and so effectually baffled the champions of the noblest science relating to earth-born things, should yet be attained, the solution of the mysterious problem will not be due to the stethoscope, auscultation, or percussion.

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### THERAPEUTICS.

REMARKS ON THERAPEUTICS—By M. M. Dowler, M. D. of New Orleans, La.—It augurs no inconsiderable amount of good in relation to the usefulness and reputation of legitimate practical medicine, that a very notable change has of late years begun to manifest itself in the medical profession, touching certain therapeutic measures which have too long, and to too great an extent shaped the course

of the practitioner, and governed his action in the treatment of acute and febrile diseases. I allude to blood letting, purgation, mercurialization, starvation, and other depressing, debilitating and depletory measures, usually denominated antiphlogistic. These have been called, *par excellence*, *curative measures*. Everything falling short of this therapeutic discipline in sthenic diseases, has been too generally set down as merely palliative, or as indifferent, or pernicious. Therapeutic adynamia being regarded as exclusively curative, under such circumstances, it has been brought about with a bold and unfaltering hand, and with breathless and excited haste. It is no intention of mine, in adverting to this subject, to deny that this adynamic condition, thus superinduced by treatment, with all its palpable disadvantages, presents many points favorable to the recovery of the patient. It concerns us not so much, on the present occasion, as to how a cure may be effected, as to how it may be *best* effected. The question we now raise, relates not to the abandonment of this draining and exhausting treatment, or to its capability in the cure of disease; but to how far we may be able to lay it aside, or mitigate its evils; how far it is essential, and how far nonessential. The *materia medica* may be justly said to be without known limit. So wide in its extent, that it may be laid down as a very general principle that every known physical agent, to what kingdom or category soever it may belong, which is capable of strongly affecting the animal organism, is capable of becoming a curative agent if appropriately administered. And in direct proportion as this principle may be found to be true, will the domain of the *materia medica* be found to extend itself, exhibiting the limited known, and the boundless unknown; administering a stern rebuke to the mere routinist as he is seen figuring on his narrow and tottering platform. With such a field in view, who should remain satisfied with the utmost he may ever be able to discover? How excellent soever may be the therapeutic means we may have already attained, the time will never arrive when we shall not have most abundant reason to seek those which are still more excellent. In the mean time, there is one important maxim which should be ever present with the physician, and that is to remove the disease with the least practicable amount of the morbid effects of remedies; and if, indeed, such effects must needs be produced, to select such capable curative agents as make the least *permanent* morbid impression. The morbid effects of remedies are a subject for serious consideration. An able work is much wanting on this

subject, treating of diseases which are the direct result of medical treatment, and particularly of the treatment of which we have been speaking. These new elementary modes of morbid action very properly invoke the aid of medicine to remove the untoward results of medication.

Amongst the reproaches that have been regularly uttered against the science of therapeutics—the oldest, most popular and useful branch of medical science—it has been urged that diametrically opposite modes of treatment are constantly pursued, and come forth claiming equal merit and efficacy at the hands of their advocates. Such objection can have no force in the estimation of any mind capable of reasoning and discovering truth; and the physician who admits the validity of such objection, is wanting in capacity to defend as well as practice his profession. This therapeutic antagonism, as thus assumed to exist, is without the least satisfactory proof, for the following reasons: 1st. The properties of therapeutic agents are almost always *not opposite to*, but merely *different from* each other. 2ndly. Admitting that two therapeutic agencies, as opposite to each other as possible in properties, may be proposed for the cure of a given case, it may so result that there may be in the same case a sufficient number of morbid conditions amenable in common to both agencies, that the one or the other remedy may cure the patient. 3rdly. There is no such thing as one disease being the reverse of, or the antipath of another; disease being characterized, not by antagonism, but by *differences*, so far as resemblances are *wanting*. The negro might as well be said to be the Caucasian. Difference and resemblance are all that can be made out. In therapeutics, different or even opposite agents—if the latter can be said in strict terms to exist—by no means necessarily, or indeed generally, fail to produce common or similar results. We even see that the morbid and physiological effects of heat and cold are correlatively not in opposition, but similar to each other. Frost-bite and burn resemble each other, and cold and heat applied to the same surface will each in turn relieve pain and subdue inflammation. Every one knows that the heat and cold, physically and as they manifest themselves to our senses, are but the mere differences in *plus and minus*. The doctrine of antagonism and opposition of one disease to another and one remedy to another, was the capital error of the illustrious Brown, who saw nothing in either pathology or therapeutics but that which related to the two great antagonistic destroyers—*sthenia* and *asthenia*. In the same disease the leading symptoms of *invasion* on the one hand and of *disappearance* on the other are often alike, as in

palsy, in relation to which a learned author most happily says: "*Tremor in corpore sano est prodromus paralyseos, in paralytico sanitatis.*" Hence when we hear of *opposite* diseases and *opposite* remedies, we hear little else than a misapplication of words, and a display of fallacious reasoning. The objection in question, therefore, so far from affording an argument against the science of therapeutics, is calculated to elicit the irresistible strength of the principles on which legitimate medicine is founded. Thus, in the same category of diseases, the most dissimilar agents may possess a sufficient number of curative points and co-incident actions—properties in common with each other, however different in degree—to cure or relieve the patients. We will suppose by way of illustration, that in a given case there may be five indications, on the fulfillment of three of which the life of the patient depends; and that on the fulfillment of the remaining two depend the restoration of the patient to *perfect* health. Three very different modes of treatment might in such case be pursued, and there is nothing unreasonable in its so resulting, that if, say the first course of treatment were adopted, the first class of indications might be barely fulfilled; if the second course were resorted to, the whole first class and one of the second; and if the third course were adopted, both the entire classes of indications might be completely fulfilled, exhibiting not the only curative, but the most highly curative mode of treatment. It follows, then, that while excellence in therapeutics can only be attained by a profound study of medicinal agents, and morbid conditions; and that while legitimate medicine tolerates nothing short of all this; blind, empirical systems often lead not only to the cure of disease, but even to important discoveries. We may however advert to one empirical system which constitutes a remarkable exception in never having either directly or indirectly enlarged the domain of true therapeutic science; which is wholly incapable of doing so, and which is simply devoid of curative capacity, and that is homœopathy.

In relation to its philosophical claims, it is wholly unworthy of serious attention or examination. It calls on its votaries to deny the more ordinary, obvious, self-evident requisites necessary as *intermedia* between cause and effect. Till infinitesimals can be admitted in diet, drink, food, air, and other agents taken into the human body, infinitissimals can never be admitted in rational therapeutics; and it is quite as philosophical to propose as diet the decillionth part of a roasted potato, or of a corn dodger, as the appropriate remedy to rescue an individual from death by starvation, as to propose the decillionth part of a grain of any medicine for the cure of

any disease. Practical homœopathy can only maintain its existence by delusion, or fraud, or both. Its unprincipled adherents often administer, under the mask of their creed, the largest and most dangerous doses of active drugs; or with a pliancy of conscience never before known to charlatanism itself, they give notice that they are prepared to treat patients, at their option, homœopathically, or "allopathically!" It has been claimed for homœopathy, by some, that though it is inherently void of any curative power whatever, it has rendered some service to the science of therapeutics in the following respects: 1st, that being in itself a mere therapeutic nullity, it shows, in its fortunate cases, how frequently patients may recover without the aid of medicine; 2dly, that in fatal cases, it exemplifies the natural course of disease uncontrolled and unmodified by medical treatment; 3dly, that it exemplifies the therapeutical effect of deluding the patient into the belief that he is undergoing active medication, when in fact he is swallowing a nullity. These effects could only, however, be realized when the dispenser of globules sincerely and "in honest sadness" adheres to his creed in the treatment of the patient; which, with the homœopathic quantum of good faith that generally exists, can rarely be depended upon; and in any view of the subject, nothing true has grown out of this empirical system which is not as old as the time of Hippocrates himself. Even the negative merits, which the opponents of homœopathy have conceded to it, it does not possess. Psychologically speaking, however, this system has unintentionally made some amends for its totally unedifying therapeutics and pathology, which consists in its having demonstrated a lower level in human credulity, than any acknowledged to exist previously to the advent of the "spiritual rappers." The result, however, is more curious than useful.

Now it is an essential characteristic of charlatanism that it should be designated as some kind of *pathy*. Hahnemann endowed his system with a name, based on one of the most absurd maxims ever uttered by man. Had he confined his baptismal office to the naming of his own system, it would have been less matter. But he proceeded to give a name to the system which descended from the father of medicine, which he designates by the name of *allopathy*.

It is deeply to be deprecated, that this appellation, which if etymologically interpreted, could only be applicable to an empirical system, instead of being spurned by the profession, should have been so far tolerated as to have become not only the popular but professional cognomen for the true practical science of medicine. Hahnemann gives this name to our sci-

ence and announces its doctrine which he declares to be expressed by "*contraria contrariis curantur*." The most popular dictionary of medicine in our country, that of Dunglison, defines allopathy to be "*curatio contrariorum per contraria*." Relating to the ordinary method of medical practice, in contradistinction to the homœopathic." [! ?] So it appears that true medical science has been reduced to a mere *pathy*, as contradistinguished from and antagonistic to the *pathy* of Hahnemann; that it has become, so far as words are concerned, associated with, and has become the mere correlative of homœopathy! The definition of allopathy laid down by Noah Webster, shows how permanently this empirical appellation has been fastened on the legitimate practice of medicine. Webster characterises allopathy "as being the ordinary mode of medical practice, in opposition to *homœopathy*." Thus the medical student, instead of being led to ignore altogether the follies and impostures of homœopathy, learns at the onset that he is choosing between two rival systems in entering on the study of true medicine. One-ideaism is the bane of medical science, and thus has the term allopathy been surreptitiously applied to legitimate medical science, and thus the preposterous platform of "*contraria contrariis curantur*." This idea has too far influenced the medical mind. The idea of inducing opposition and antagonism of conditions in the cure of disease is, as we have already suggested, in all probability quite erroneous; and it has led to the adynamic routine of treatment in acute disease at which we glanced at the beginning of this communication.

Unhappily physiology, pathology and therapeutics are by no means in such state of advancement as to enable the physician to determine in most instances how medicines act, and in what manner they remove disease. He can often learn very little beyond the mere fact, that the disease has been removed by the means which he has applied. Medical platforms have been laid by men of genius, in succession, for centuries, and all have proven too narrow to sustain the broad fabric of medical truth. The latest of these have been among the worst, as for instance, the gastro-pathic foundation of Broussais. We can neither assume the "*similia similibus*," nor the "*contraria contrariis*," without falling into stupendous and dangerous fallacies. The manner in which the most familiar agents of the *materia medica* cure disease is very imperfectly understood. There is no therapeutic agent in the efficacy of which all christendom is more generally agreed than Peruvian bark, and yet its *modus operandi* embodies a controversy which remains unsettled.

The idea of allopathic action, and antagonism of disease with disease and remedy with remedy, and the doctrinal monstrosity of "*contraria contrariis curantur*," have undeniably had immense weight in the practice of medicine, and lie at the very foundation of the extravagant system of depletion and exhaustion in the treatment of accute and febrile diseases, to which we have alluded, under these very exceptionable notions, the efficacy of remedies, in these diseases, has been to a lamentable extent measured by the number of ounces taken from the arm, the amount of discharges *per anum*, in response to purgatives, the number of grains of calomel or antimony which has been swallowed, and the extent to which the patient has been subjected to the process of starvation. Cups and leeches have been deemed curative in proportion to their number. The first step in the treatment of the acute phlegmasiæ and fevers has been under the auspices of "*contraria contrariis*," to simulate death in the form of syncope. There is a strong and growing disposition on the part of the profession to throw aside the lancet in these affections; nevertheless, the routine of extracting blood by cups for the local pains and general excitement of yellow fever is so generally looked for, that the physician often yields to the outside pressure; and there is no physician who has practiced in this disease here, who has not been frequently accosted, by enterprising candidates for patronage, with the question "who cups for you?" The cupper is a powerful and influential personage, who is seen hurrying and fussing everywhere. He is "nothing if not critical," and is scarcely second to the doctor, lecturing the bystanders and enlightening their weak minds on the terrible state of the patient's blood. He is indeed superior to his master in the important fact, that his profound services always command the ready fee. He takes the professional reputation of medical men in his high keeping, and in his journeyings from house to house takes care to proclaim their respective merits in the ratio of the number of cups ordered. Now as we before observed, we do not deny that this adynamical routine abounds in curative power, but we do insist that its countervailing morbid effects are such that they cannot be too seriously considered. How far these assaults on the vital functions may be laid aside or mitigated, without detriment to the patient, is undeniably a most momentous subject for enquiry. It is fully conceded that mercurial salivation is demanded by the exigencies of the case in certain morbid conditions, but the physician who unnecessarily subjects his patient to that morbid effect of remedies, has committed a gross outrage on humanity; and yet how many millions of mouths

have been unnecessarily poisoned, and constitutions ruined by this venomous drug! The abuse of remedies, of which we have spoken, has brought immense opprobrium on a noble profession, and has given an onward impulse to the organization of botanical quacks and eclectic and homœopathic charlatans, into schools, colleges and societies.

It cannot be expected, in the nature of things, whatever class of agents we may resort to in the treatment of active disease, that these agents can do otherwise than exhibit morbid, as well as curative effects. The best that can be done is to select these agents which in this view, are the least objectionable. Now we hold that the class of medicines commonly called *narcotics*, are quite as replete with curative power, both in the acute phlegmasiæ, and in active febrile diseases, as any or all of the adynamic agencies of which we have been speaking; while the former lay the vital functions under comparatively limited and temporary depression. Thus, opium in ample doses has been found to be at once antiphlogistic, febrifuge, diaphoretic, and anodyne, with almost inappreciable and quite temporary morbid effects.

It must be confessed that the ordinary horn-books of the profession do not admit the fact. In 1836, Dr. George G. Sigmond, one of the ablest and most distinguished physicians in London, delivered a course of lectures, which appeared in the London Lancet of that period, in which he utters the following important truth: "*Of all the different classes of medicine we possess, we may safely consider narcotics, skillfully, judiciously and watchfully administered, the most important.*" As a pretty fair representation of the teachings of the horn-books of medicine, we subjoin the following remarks on the above, taken from the "Institutes of Medicine" by the distinguished professor, Martyn Paine, of the University of New York.

"On the contrary," says Professor Paine, "I have endeavored to show in the various parts of this work, that narcotics are but little more than humble auxiliaries to more important remedies, and then only in a comparatively small number of cases of disease; or they are mere palliatives, giving a temporary ease by blunting sensibility where death is probably inevitable, and thus easing the sufferer out of existence."

"That narcotics are extremely deficient in curative virtues, should be sufficiently apparent from what has already been said of the uses to which they are constantly applied. But even these intentions can rarely be fulfilled by narcotics, where much disease is present. We must resort to the class of antiphlogistics for our curative means; and, if the narcotics be summoned to their aid, it should be done with the greatest

caution, or they may prove fatally morbid. We may exhibit opium, &c. for the relief of mere spasm of the stomach, or to procure rest, &c. where no important acute disease is present. But he who should employ them to assuage the pain of pleuritis, enteritis, or any other active form of inflammation, and, in a general sense, of chronic forms, would either most seriously aggravate the disease, or destroy the patient.

“Whenever there is any affection of the head, or any tendency to cerebral disease, so great is the liability of narcotics to induce congestion of the brain, that they are totally inadmissible where that organ is increased in its susceptibilities. And let us consider their never-failing effect in their ordinary doses, of so injuriously modifying the action of the glandular organs, that the secretions of the whole, especially of that most important organ the liver, are more or less diminished; whereby nature is obstructed in one of her greatest processes natural and curative; and morbid influences are reflected upon all diseased parts, and upon the whole organism. Should there be set up in the skin a perspirable action, it is not of a salubrious nature; and here again we see the evils that arise from regarding the product, and not the nature of the action upon which it depends.” \* \* \*

“The most extensively useful effect of narcotics is that of procuring sleep.” \* \* \*

“In serious inflammation of the bowels, on the other hand, they (opiates) are entirely inadmissible. \* \* \* It is in all such instances a subordinate agent. \* \* \* The pain of mucous and serous inflammation of the intestines may be exactly the same, and opiates curative in the former, but certainly fatal in the latter.”—*Institutes of Medicine*, p. 584-6.

“In respect to the agents now before us, (narcotics,) there is yet a smaller class who are equally unhappy in their estimate of their virtues; and while the *stimulating* school exhaust the energies of nature by adding to the intensity of the disease in their peculiar way, the *narcotizing* school do the same mischief by a similar neglect of the pathology of disease; and what, in either case, should be attacked by the lancet, cathartics, antiphlogistic alteratives, &c. is roused into greater immediate violence by tonics and stimulants, or indirectly by other morbid influences which appertain to the narcotics.”—*Ibid.* p. 584.

We have annexed these long extracts from the fact that they emanate from a high authority, and are a portion of the general doctrine which medical students devote their time and money in acquiring, and from the fact that they embody doctrines which it is meet that they should unlearn as speedily as

possible. Since we have ceased to rely on printed books and magisterial authority in the practice of medicine, we have had occasion to arrive at conclusions in the premises something like the reverse of the views put forth in the above quotations. We are not content to shut out all faith in curative resources in active disease save in the ordinary bleeding, purging and "alterative" routine. In regard to one narcotic agent, opium, our observation and experience lead us to regard it as one of the most highly curative agents of the *materia medica* when administered in free sedative doses at the inception of the acute organic phlegmasiæ, and of various febrile diseases, controlling and preventing the development of phlogosis and fever. We have tried it in the early stages of the very diseases which Professor Paine adverts to, in large doses—tried it in pneumonia, peritonitis, enteritis, and puerperal fever; and we have found it a most reliable agent as a febrifuge, an antiphlogistic, a refrigerant, a diaphoretic, and anodyne. In acute dysentery, opium unaided, except by mild aperients, is equal to the cure of the disease. In the No. of "the Journal," for November last, I gave a sketch of my experience with opium in the treatment of yellow fever. At the onset of this disease, so powerfully curative are its effects, that administered in large doses, it is capable of putting an end at once to the febrile symptoms, and rescuing the patient. Such treatment, according to Professor Paine, must "either seriously aggravate the disease, or destroy the patient," not being applicable, according to him, when "any acute disease is present." Every one knows that in yellow fever there is "a tendency to cerebral disease," there is "an affection of the head," and the brain is "increased in its susceptibilities;" and so far from opium being "totally inadmissible," in that disease, our experience proves to us that under its use, the routine of purging, bleeding, and "alteratives" represented by Prof. Paine, as alone "curative" in active disease, may become unnecessary; and that opium, "skillfully, judiciously, and watchfully administered," to use the language of Dr. Sigmond, may be confidently employed. In puerperal fever, I have found opium to possess the highest curative powers. To represent narcotics, therefore, as "humble auxiliaries"—"mere palliatives, giving temporary ease, and blunting sensibility where death is inevitable," and, "easing the sufferer out of existence;" as given merely to "relieve spasm of the stomach, and to procure rest, &c. where no important disease is present;" as being useful only "to procure sleep;" as "entirely inadmissible in serous inflammation of the bowels;" as being "in all such instances subordinate agents;" as likely to be "certainly fatal in serous

inflammation of the bowels"—and all this too in our present unsettled, unsatisfactory, and imperfect knowledge of the *modus operandi* of medicines—affords an example of the strong tendency in medical teachers to contract the sphere of the *materia medica* to a narrow routine in acute diseases, and to leave them to be exclusively, (in the language of Professor Paine,) “attacked by the lancet, cathartics, antiphlogistics, alteratives, &c.” On the morbid as well as the curative effects of these remedies, whole volumes might be written, and they are like most other known therapeutic agents, lamentably deficient in curative power. The learned professor need not have gone out of the way to denounce either the “*stimulating*,” or “*narcotizing* schools.” When he condemns these schools, he had no reason to grant an immunity to the *evacuating school* of physicians on whose platform he rests. The whole must be confessedly unsatisfactory so long as patients so numerously succumb under all modes of treatment, and melancholy enough are the records of the adynamic routine in the practice of medicine. We should rather add to, than contract our resources. In future I purpose to recur to this subject.

The doctrine or *similia similibus curantur*, if detached from the follies and impostures of homœopathic pharmacy and posology, contains perhaps as much truth as the doctrines of antagonism and *contraria contrariis*. It cannot be denied, however, that diseases *apparently* the most similar, may have in *reality* more points of difference than similarity. This, for all that can be proven to the contrary, may be invariably the case. Certain narcotics produce an eruption of the skin resembling, to the eye, scarlet fever, but in its absolute and essential character, the dissimilarity is of course overwhelming. Violent drastic purgatives and powerful antimonial emetics have been known to cure cases of algid cholera. This kind of treatment applied to a person in health, is of course capable of producing cold clammy perspiration, cramp, vomiting, fluid stools, and even collapse. But who can be so ignorant as to pronounce the medicated and choleraic conditions to be really similar to each other? A few mere symptoms constitute all there are in common, the difference wholly preponderating over the resemblance. This remark will probably hold good in relation to almost all diseased conditions assumed to be similar to each other. Upon the whole both the doctrine of *contraria* and *similia*, labor under the logical infirmity of being true and false at the same time, that is to say, partially true, and partially, and not very partially, false.

Whatever cause of complaint the medical profession may

have against the mass of the people, the former surely can never accuse the latter of a want of faith in medicine. A readiness to swallow medicine, and to rely on its efficacy, is one of the characteristics of the sovereign mass. Their error generally lies on the side of excessive faith and hope. And not only do they rely on medication, but they are strongly impressed with the absolute necessity of powerful, active, and severe treatment. There is not the least likelihood that the mass of the people will ever countenance such *niaiseries* as homœopathy. They will leave the latter system for the exclusive benefit of czars, emperors, kings, and presidents, and to languishing dames who are about "to die of rose in aromatic pains," who will never consent to be physiced like common people; and who can never swallow the black decoction. The common mass very well know from their daily avocations, that every effect which it is desirable to produce, must have an agency adequate to the production of that effect, and that something cannot come of nothing; their error lies in overdoing; and hence in every acute and febrile disease, the routine of exhausting treatment is constantly expected, and even required by the patient. In 1854 we were called to visit a stout, athletic, plethoric Irishman, who had just been violently smitten with the yellow fever. We ordered him, at once, ten grains of opium, and to take two other five grain doses, one every six hours. The first dose produced as it were a torrent of perspiration, calmed the action of the heart and arteries, removed the severe pains of the head, back, spine, and limbs, and threw him into a tranquil slumber; he took both of the other doses in the next succeeding 24 hours; and no other medicine was administered during treatment, excepting a dose of Glauber salts; and he became rapidly apyrexial and convalescent. On presenting him our fee-bill, he prayed that the same might be reduced, from the fact that "the powthers did not give him an operation, and that he had never been cupped, bled, or blistered, *entirely*." The people have taken their cue from the profession, in which they have any amount of faith, and advertising quacks and nostrum vendors take advantage of faith and confidence to swell the mighty mass of physic bought and swallowed, worse than unnecessarily.

In sthenic disease, the discipline which the patient is required to undergo in regard to diet, is often highly injurious. The gastro-enteropathy of Broussais, amongst other extravagancies which must always attend the *one idea system* in medicine, gave an impetus to the starvation system in the treatment of active disease. Every fever, according to him and

his disciples, being a true *gastrite*, or *gastro-enterite*, the phlogosed mucous membrane was deemed to be in imminent peril for a long period; and the most rigid abstinence was enjoined—no ingesta being allowed in the mean time, save gum water and other mucilaginous and acid slops; while blood was abstracted from the arm, and scores of leeches were applied to the epigastrium. The adynamia induced by starvation was always excessive, and doubtless many succumbed for want of proper nourishment. A case once occurred to us in this city which impressed us strongly. About 18 years ago we were called into what is now named Jefferson City, to visit a young man who had been confined to his bed for 23 days; and who, losing confidence, had discharged his physician. From all we could learn he had originally been attacked with a light ephemeral fever, of no serious character. His attendant treated him altogether *à la Broussais*, regarding his case as a true "*gastro-enteritis*." He was freely bled, and leeches had been repeatedly applied to the epigastrium, and he had had little other nourishment than the slops to which we have alluded. Depletion and inanition had given him an irritable pulse, and an excited nervous system, and a general sense of distress which he could not define. He had no local manifestations of disease whatever. He insisted that his case must necessarily terminate fatally, as he could no longer endure his undefinable and wretched sensations—die he must! I told him that small portions of tender beefsteak taken frequently during the day would most assuredly bring his case to a favorable termination, and he tried this treatment with complete success.

The errors of this theorist have not yet completely passed away with regard to diet; and now that the gastro-enteric phantom has been got rid of, it behooves the profession to reflect seriously on the untoward and morbid effects of suspending nutrition, repletion, and hæmatisis during the treatment of active disease. The morbid effects of the starvation system often far outweigh its curative effects, and how far it may be dispensed with, without prejudice to the patient, should be constantly considered by the physician.

*A Critical Review of "An Article remarkable only for its Execrable Literature, the Impotence of its Malice and Folly of its Positions."*

A FRIEND has sent us the following reply to the severe and unmerited criticism by Dr. Wellford of the communication in the June number of the *Stethoscope*, signed *Æquus*. It will be seen that our friend most effectually carries the war into Africa. When Dr. Wellford set himself up as a critic, he should have been careful that his own productions were not obnoxious to criticism. The undersigned holds himself responsible for every word of the following communication :

"Prof. W. reminds me of an old friend, who was professedly a great philological martinet, thoroughly acquainted, in his own opinion at least, with these much vaunted 'harmonies,' and a profound hater of 'execrable literature,' but who unfortunately, in the estimation of all others, was quite ignorant of all the cardinal general and special rules of good composition and syntactical arrangement and accuracy. Our friend was remarkably fond of controversy, and often abounded with quotations from the Greek and Latin classics. On his last appearance, however, in public, in making a classical quotation, whether from Homer or Hesiod or one of the fathers, he made a Latin adjective in the singular number agree with a Greek plural noun. This grammatical feat does not exceed, if it equals, many of Prof. W.'s philological gymnastics. But we hope that the same fate, (for we never after this monstrous exhibition heard of our friend in controversy,) does not await Prof. W. It would be too bad for posterity, and especially the many readers of the most 'amusing *Stethoscope*,' to be deprived, by a similar fate, of the future labors and wonderful exploits of Prof. W. in these walks of literature.

"But seriously, although Prof. W. seems to be most profoundly impressed with his own great critical acumen and accuracy, will not the reader be amazed and amused to learn that there is hardly a sentence (surely not a paragraph) in his paper that will stand the test of searching and legitimate criticism. As the delicate sensibilities of his literary and critical organism are so much shocked by the rather careless expression of *Æquus*, that the 'length of the session has been lengthened,' it is a matter of deep solicitude among his friends to reflect on the fearful consequences that must result to him, when some of his own feats are brought to his review. How can he survive the effects of his own expressions: A '*meeting of the board which convened*;' the '*same identical reform*;' detaining us longer from his *rhetoric*;' when reviewing a written paper, '*concealing his identity*;' '*he with others are engaged*;' '*all their indignation, every grief and every impropriety, real and imaginary, is visited*;' and scores and hundreds of others of similar character? Indeed, too numerous and diversified are the grammatical solecisms, the unphilological criticisms and phrases, and the puerile and execrable absurdities of speech abounding from the first to the last sentence of Prof. W. to be recounted.

"It is no unusual thing to find every leading rule of grammar disregarded and violated. Twice in the short recital of phrases of a preceding paragraph will be found a violation of the first rules of syntax—a plural verb with a singular nominative case, and a singular verb agreeing with two or more nouns, coupled by a copulative conjunction, equal to a plural nominative. But great genius disdains *rules* and limits, and so does Prof. W.

"Again, we often find full stops or periods where none are required by regular construction or the sense, and '*vice versa*'—no such points where they ought to be. We see a glorious confusion and interchange of places between all the

points of clear and perspicuous composition, colon and periods, commas and semicolons, and marks of admiration and marks of interrogation. In our very youthful days, we have sometimes heard our schoolmates attempt to decline adverbs, and conjugate nouns, but always with signal failure. We are now, however, convinced, if this wonderful feat is ever accomplished, it will be by this 'great Caliban of literature' and philology, Dr. W.: and unless his improvements in these walks meet with some sudden check or arrest, we will not have to wait long. We hope, after this truly amusing display of the wonderful powers of this learned philologist, none will dispute his right to exclaim with Mrs. Malaprop, 'Surely, if I understand anything, it is the use of oracular idioms, and a nice derangement of epitaphs.'

"When Prof. W. appears on the stage in his new character, while he affords vast amusement by his *puisne* efforts at wit, or his puerile and ridiculous attempts at criticism, we candidly acknowledge he does himself great damage and injustice, and we regret it. The position he occupies is an unenviable one, and must be mortifying to his sensibility. It will, however, teach him a lesson, which he will not easily forget, and will certainly avoid in future.

"Our days for writing theses, and going before such an *august board* as that alluded to by Prof. W. for examination for the degree of *M. D.* have long since passed; and although he may exclaim of this board, '*quorum magna pars sum,*' yet we candidly confess we should not entertain any serious fears as to results whether the examination embraced only the *harmonies* of English literature or the *science* of our profession, and all its cognate branches. And although we do not intend to challenge to a discussion any of the graduates of the Richmond school, so kindly suggested by Prof. W. we would not decline an examination and discussion with himself before an impartial and competent board either on medical or literary subjects. We feel as if we should pass such an ordeal with no misgivings or fears; and although successful, we should not expect *much* eclat or renown.

"Prof. W. informs us, that a certain 'grand result does not appear to have been ascertained by the Stethoscope *so late as its December number*, although it had been announced for months previously, and was then actually in progress.' We will say nothing of the confused, intricate and grammatical blunders of this specimen of English literature, but only ask the reader if ever before he heard of a 'grand result announced for months,' being 'actually in progress.' Such flights, such exploits, are truly more than amusing—they are dazzling.

"We might dissect—we beg pardon—we might go on and analyze very many more of Prof. Wellford's precious *morceaux* of English literature and grammatical harmonies, but we can only allude to two or three others, and conclude this part of our reply. We find, however, the objective case used by him as the nominative to the verb, and the possessive case in another instance governed by a preposition. These and every other conceivable and inconceivable violation of rules, solecisms and freaks in composition, are found in every paragraph, while he himself gloats with so much pleasure and delight on our 'length of the session being lengthened.'

"'They are as hard to please and as great adepts at scolding as Mrs. Caudle, herself. Like that agreeable and good humored lady, nothing can be made to suit their notions of propriety.' Now, this is a little piece of gossip, of which we were ignorant. We never before heard, that these gentlemen were particularly pleased with the amiable temper and irresistible fascinations of this distinguished lady. Let us look into the grammatical structure of this sentence a moment. To do so, we must transpose its members. 'Nothing can be made to suit their notions of propriety, like that agreeable and good humored lady.' Twist and distort this sentence as you please, this is its legitimate and only meaning. One can guess what Prof. W. means, but we are bound by English literature and harmonics to extract what is said, and not to guess at what is meant. The charge against these gentlemen is one of grave character, which we must leave to themselves, who are abundantly able to settle, as we presume Prof. W. full well knows before this time, and hope nothing very serious may grow out of it. We also hope their amiable and accomplished better halves may never have any eloquent twinges of jealousy on account of this charge against them for being too well pleased with Mrs. Caudle.

"'But, like the rays concentrated by a lens, all their indignation, every grief, and every impropriety, real or imaginary, is *visited* on the schools.' Here we

have to transpose again the members of a sentence to arrive at its true and legitimate meaning. Indignation, grief and impropriety *are* (not *is*) visited, like the rays of a lens, on the schools. It will bear no other construction, although here, too, we may *guess* at Prof. Wellford's *meaning*.

"Perhaps we ought not to produce before the gaze of the admiring world, and the already excited and fitful imagination of Prof. W. any more specimens of his lucid and perspicuous literature. But we will illustrate our charges by reference to one sentence as it came from the hands of its author, finished and complete, without a verb, and another without a subject. We can hardly be condemned by any discreet and right thinking mind for spending some time on some hundred grammatical solecisms in Prof. Wellford's paper, more especially as he has set us such an example as writing some pages on the mere accidental insertion of a comma and a small word by the printer in the communication of *Æquus*. We confess we are gratified to find he is so much and so gravely interested by them, as we feel assured, if there were other and more important errors, they could not possibly have escaped the notice of so minute and profound a critic.

"A few weeks.' 'And then specifies two opportunities.' Two such sentences from among many others of the same, or similar structure and character, are all we will now array before our readers. The first has no verb, and the second no nominative to the verb. But Prof. Wellford's genius discards all rules, and disregards all the standards of 'English literature' and 'harmonies.'

We acknowledge our deep indebtedness to Prof. W. for the most interesting piece of unwritten history we have enjoyed for many months. We allude to the episode of the miller, the servant and Prof. W.'s benevolent friend. We cannot but suggest to him, that such a theme is worthy of an epic poem. For one, we would advise Prof. W. to try his hand on verse. We have great faith in his success in heroic verse. He cannot fail, succeeding so eminently as he does in harmonies and English literature. Homer never would have been known, if he had not written the *Iliad* and *Odyssey*. Prof. W. must not be discouraged."

We are now quits with Professor Wellford. He has given us an Oliver, and we have returned a Roland. We assure him we are in most excellent humor, and disposed to be at peace with him and all mankind. We entertain towards him no hatred, malice or ill will. The controversy may now end; or if Prof. W. elects to renew it, we will let "slip the dogs of war." But we would advise him, in all friendliness and sincerity, to "be as easy as he can."

"Lay on, McDuff,  
And damn'd be he who first cries, hold, enough."

R. A. LEWIS.

We have received from the publishers the following valuable works too late for an extended notice in our present issue:

1. Clinical Lectures on Diseases of Women and Children, by Gunning S. Bedford, A. M. M. D. Professor in the University of New York, and published by Samuel S. & W. Wood.

2. Pathology and Treatment of Leucorrhœa, by Tyler Smith, M. D.; published by Blanchard & Lea, Philadelphia.

3. Medical Lexicon of Modern Terminology, by D. Meredith Reese, M. D. L. L. D.; published by Samuel S. & Wm. Woods, New York.

THE

# STETHOSCOPE.

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VOL. V.

RICHMOND, VA. SEPTEMBER 1855.

NO. IX.

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ORIGINAL ARTICLES.

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## **Dr. A. Snead's Hospital Reports.**

DEAR SIR—In compliance with your earnest solicitation, I send you the following short and imperfect statement of the eight cases of yellow fever, which have been admitted into the city hospital. The cases have afforded me only a slight opportunity of studying the disease, and the report will, I am sure, not enlighten the minds of others :

CASE I.—Samuel Tynan, aged about twenty, came from Portsmouth on Saturday, 4th August. At that time was well; yet during the night he sickened, and was attended on Sunday, Monday and Tuesday by two eminent physicians. On Tuesday night at 12 o'clock he was transferred to the city hospital, at which place I visited him at 9 o'clock Wednesday morning, accompanied by Drs. Wellford and Conway. He had already had black vomit, and several times during that and the next day ejected like matter from the stomach. Eyes injected and conjunctiva quite yellow. The skin was not as yellow as it is often seen in jaundice, yet it was decidedly tinged. Gums were spongy, and from which there was slight oozing of blood. The teeth were covered with sordes. The pulse was rather irritable—pulsations ninety-one per minute.

The patient had been under treatment since Sunday morning, and was, when admitted, taking small doses of calomel. The calomel was continued, and small doses of spts. terebinth ordered in addition. Cold applications to the head, and to be kept quiet in bed.

I omitted to state that the patient complained much of pain in the head, backache and pain in the legs.

6 P. M.—The condition of the patient but little altered. The turpentine has appeared to disagree with the stomach, and it was ordered to be discontinued. Calomel to be continued; and a blister over the hypochondric and epigastric regions ordered, to be dressed with mercurial plaster. The bowels to be moved by an injection of ol. ricini and spts. terebinth,  $\frac{3}{4}$  iv each in a pint of gruel.

Thursday, 9 A. M.—The patient is very dull, and with difficulty can he be roused. The black vomit has continued. Pulse ninety beats per minute, and otherwise almost normal. Directed the calomel to be continued, and ordered half drop of creosote dissolved in ether, together with a small quantity of brandy, to be given every two hours. The patient died, convulsed, at 2 P. M.

CASE II.—Margaret Hughes, aged about twenty-five, came from Portsmouth on Wednesday, 8th, and was not quite well at that time. She was admitted into the hospital at 10 P. M. on Sunday, the 12th. She then had fever, and was very restless; suffered great thirst; had no vomiting, although she complained of constant sick stomach. She had been under treatment, so that I only ordered her to be kept quiet in bed and a very small quantity of cold water to be allowed occasionally. In this case there was less injection of the eyes, and less of the icteric hue. I at first had some doubts as to the true nature of the disease, yet these doubts were subsequently removed, and I am satisfied it was a case of yellow fever.

At my visit on the morning of the 13th, the condition of this patient I thought improved. I gave her 15 grs. of calo-

mel, and withheld almost everything from the stomach, allowing only a little tapioca. On the afternoon of the 14th, there being difficulty of respiration, coolness of surface, and more decided icterus, I had a large blister applied over the liver and stomach, and this afterwards dressed with mercurial ointment. This patient would, in despite of all that could be done, from time to time get out of bed, and otherwise disobey orders. A second dose of calomel, with a quarter grain of morphine, was given to her. Besides, stimulating injections and a free use of mustard were resorted to. She, however, died at 6 o'clock A. M. of the 17th.

I had indulged hopes of the recovery of this patient, but she was at all times so ungovernable, that to this may the want of success in no small degree be attributed.

CASE III.—James Muldoon, aged about thirty, came from Portsmouth on Friday, the 10th, and was then ailing. He was brought into the hospital at midnight on Sunday, the 12th. There existed great muscular prostration; pain of head, back and lower extremities, a dusky, icteric hue of skin; surface rather cool; great tenderness of epigastrium, and sense of weight in that region; eyes icteric and suffused; mind clear; mucous membrane of mouth spongy, and slight exudation of blood from the gums; tongue moderately coated, with a brownish fur; pulse rather irritable; pulsations ninety-five per minute. Treatment. Ordered a large blister over liver and stomach; mustard plasters to the neck and back and extremities. Before any medicine had been given, he ejected about half a pint of black vomit from the stomach. The vomiting was several times repeated. I gave twenty grains of calomel, with one-third of a grain of sulph. morph. Prohibited drinks, yet allowed the mouth to be washed with water.

13th, 8½ A. M.—Slept some last night. There has been no vomiting for several hours; intellect rather dull, and complains of pain in back and limbs; tongue red, and bleeding from the gums and mucous membrane of the mouth; hands

rather cool; pulse a little feeble; pulsation about one hundred. His bowels have not been moved, and but little discharge of urine. Ordered an enema, composed of ol. ricini  $\bar{z}$  iv, spts. turpentine  $\bar{z}$  iii, and a pint of gruel. He continued to get worse, and died at 7 P. M.

CASE IV.—Thomas Totty came from Portsmouth on Wednesday, the 8th, and was then sick. He was brought into the hospital at 11 o'clock at night of the 12th, and when first seen by me, he was in a state of perfect unconsciousness. He was evidently apoplectic; eyes yellow and suffused; pupils dilated; skin icteric; respiration difficult and measured. In fact, he was in a dying condition, yet he was not dead until 9 P. M. of the 13th. No treatment was instituted.

CASE V.—Ellen Casey, married, aged about thirty. She came from Portsmouth on Monday, 6th August, and was taken sick on Saturday, at 1 P. M. The symptoms, as detailed, were headache, pain in back and legs, sick stomach and lassitude. This patient came into the hospital on Monday evening, and was first seen at 9 P. M. She then complained of pain in head, back and limbs; sick stomach and very marked epigastric tenderness, thirst, and general distress. Eyes yellow and injected; gums spongy and some slight oozing of blood; tongue red and furred; pulse about ninety-five, and irritable, I gave twenty grains of calomel and a quarter of a grain of morphia in pill. This was immediately rejected, along with about twelve ounces of black vomit. The calomel having been rejected from the stomach, and black vomit positively existing, I at once resolved to try and give the much praised muriated tincture of iron. I ordered fifteen drops to be given in water, and this dose to be repeated every two hours.

14th, 9 A. M.—Has not again vomited; tongue dry; teeth covered with sordes; mucous membrane of mouth and gums injected, and a slight oozing of blood from them; eyes suffused; general yellowness of skin. Ordered a stimulating

injection, continued the muriated tincture, and allowed small quantities of cold lemonade.

2 P. M.—Condition pretty much the same as at morning visit.

9 P. M.—Convulsions, black vomit, and is evidently dying. Died at midnight in severe convulsions.

CASE VI.—Dennis Murphy was brought into the hospital on the 16th, at 10 P. M. His mind was then in such a condition that I could not rely on any statement he made. He had, however, been to Portsmouth, from which place he had only recently returned. He was put in bed. I ordered a warm mustard foot bath and a little warm tea, and no medicine. During the night he became boisterous and almost uncontrollable. Towards morning, having become more peaceable and quiet, he was left alone by the nurse only for a few minutes, while he had gone into another room. During this very temporary absence, he arose from bed, and forcing the fastening of one of the windows, leaped out, from whence he was taken, returned to his bed, and was dead when I visited the hospital next morning. I cannot say positively, yet think this was a case of yellow fever.

CASE VII.—Margaret Garvey, a young, stout Irish woman, came from Portsmouth on Wednesday, 8th, but was not taken sick until about eight hours before she entered the hospital, which was at 10 P. M. on Sunday, the 12th. At this time her aspect was that of one suffering from the onslaught of some grave disease. Her countenance was haggard, and her muscular strength greatly prostrated, so that she could barely walk. Complained of headache, pain in back and lower extremities; some sick stomach; pulse not much disturbed; skin warm. Treatment. To be kept well covered in bed. Not even any drink to be taken into the stomach. Gave a pill composed of twenty grains of calomel, and one-third grain of sulph. morph. In two hours she had fallen to sleep,

and the surface was bedewed by a warm general perspiration.

13th, A. M.—Slept well last night, and is yet disposed to sleep. Ordered sulph. magnesia  $\frac{3}{4}$  i. This moved the bowels late in the day.

14th.—She is doing well. Allowed some rice water and a little lemonade. No medicine.

15th.—Is doing well; tea and tapioca seasoned with nutmeg and wine. After this, she took a small dose of oil, and no other medicine was given except quinine, which appeared to have a happy effect.

CASE VIII.—Patrick Garvey came from Portsmouth on the 8th, and was then slightly indisposed. He was brought into the hospital on Sunday night about 10 o'clock. He had been taking medicine (what I do not know) before his admission. He complained of headache, pain in back and limbs, sick stomach, and had vomiting of a greenish glairy matter, bleeding from nose, gums and mucous membrane of the mouth; epigastric tenderness; slight injection of eyes, with moderate icteric tinge of eyes and skin generally; thirst. Treatment. To be kept quiet in bed; large blister over the liver and stomach, and nothing whatever to be taken into the stomach.

13th, 8½ A. M.—Blister has drawn; to be dressed with mercurial ointment. Has not vomited since the drawing of the blister. A little lemonade and rice water allowed.

14th—Gums spongy, and slight bleeding. Diet as on yesterday.

15th, A. M.—Rested pretty well last night; skin too cool; bleeding from nose and gums. Ordered an injection of turpentine, oil and gruel. Diet, tapioca seasoned with wine and nutmeg.

9 P. M.—Is improving. Same diet, and a little brandy and water.

16th—Is improving. Same diet, with a little chicken broth; brandy and water. After this, quinine was used in two grain

doses. He has gradually improved, and is now walking about the hospital.

I have now, Doctor, made, at your request, the foregoing imperfect statement of the very few cases of yellow fever that have come under my care, and I have made the statement with much hesitation, because a report should have for its object the instruction of others. No such merit can be claimed for this report, as the reporter knows he has himself only entered on the study of the first lesson of a learner—and I trust that, after you have examined what I have written, you will agree with me in consigning the paper to some safe place, from which it will never again make its appearance.

Yours truly,

A. SNEAD.

DR. G. A. WILSON.

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### **A Case of Metritis, followed by Obstinate Vicarious Menstruation.**

REPORTED BY SENEX.

On the 8th of July 1846 I was called to see Maria, slave, aged eighteen years, a robust, well developed looking woman. I found her with high fever, a tense pulse, and complaining of acute pain and tenderness in the "bottom of the belly;" the thighs flexed on the pelvis. On enquiry, I was informed that she had always enjoyed good health, and two days previously was engaged in the harvest field, when, and at the commencement of her menstrual period, she went into the spring branch "to cool herself." This act of imprudence was followed by a prompt arrest of the flow. During the night she had strong rigors, followed by the state of inflammatory reaction in which I found her. With such symptoms, and such a history, the diagnosis was easy, and the coast clear for the

use of heroic remedies. My patient was raised in bed, and venesection practiced to faintness. Six hours afterwards reaction was again fully established, without notable diminution of the intensity of the symptoms. The orifice in the vein was again opened, and blood permitted to flow until faintness ensued. She was then ordered a large opiate, combined with a purgative dose of calomel, for the night.

On the 19th I found the arterial excitement considerably lessened; pulse softer and more frequent; skin somewhat perspirable. Complaints of nausea and dysury, with tenesmus. Opiate had secured quiet without sleep. No action from the calomel. Ordered twenty grains of calomel, to be followed in six hours by a dose of castor oil. Fomentations of hot wheat bran to the abdomen.

20th—Found the patient still suffering considerable fever, with pain and tenderness over the hypogastrium. The purgatives had acted very freely. Directed a solution of tartar emetic and nitrate of potassa, to be taken at regular intervals.

21st—The antiphlogistic solution had acted happily, as was evinced by the diminution of the symptoms for which it was prescribed. Directed its continuance.

22d—Patient still improved; skin perspirable; pulse diminished in force and frequency; bowels torpid. Ordered ten grains of calomel, to be followed in six hours by a full dose of sulph. magnesia; and after it had acted well, twelve grains of Dover's powder.

24th—Found my patient in a satisfactory state of convalescence.

27th—Still improving. Discontinued treatment and my visits.

But in about three weeks I was again called to see her, and found the convalescence had not been as complete as was expected. She still complained of pain in the pubic region, with dysury and other unpleasant pelvic sensations. She had regular evening exacerbations of fever; considerable tenderness on pressure. I thought I could detect, through the abdominal parietes, a perceptible uterine tumor, leading to the idea that

the acute metritis had been followed by enlargement and engorgement of this organ. After the action of an efficient purge, blue mass was ordered—its daily administration to be continued to incipient ptyalism. Also, counterirritation—to be kept up by means of blisters and tartar emetic ungt. alternately, on the lower part of the abdomen and over the sacrum.

This plan of treatment was persevered in for about four weeks, by the expiration of which time there were no longer any rational signs or symptoms of disease of the pelvic viscera.

But my patient was greatly reduced in strength and flesh, presenting those symptoms, so characteristic of anæmia in the colored race. She was now ordered a nourishing diet and the use of general tonics.

In the month of October I was again called to this patient. I found that she had to a considerable extent recovered her strength and usual embonpoint, but no return of her menstrual function. For two or three days she had been suffering with severe pain in the head and eyes; the conjunctival vessels engorged with blood; photophobia distressing; and for nearly twenty-four hours she had been harassed with sneezing so continuously as to prevent the ingestion of solids or fluids. During my visit these unpleasant symptoms were in a great measure relieved by the spontaneous occurrence of a pretty copious epistaxis.

Having been informed that she had complained of late of pelvic pains and uneasiness, I regarded this hæmorrhage as vicarious of the menstrual function. She was accordingly directed to have occasional aloetic purgatives during the interval, and warm hip baths about the time of the next menstrual period. But these remedies failed to excite the natural menstrual elimination.

In the month of December my patient suffered hæmorrhage from her lungs, attended with asthmatic breathing and other unpleasant pulmonary symptoms. To avoid tediousness in detail, I will state that these pulmonary symptoms were troublesome throughout the winter, requiring repeated use of the

lancet, and long continued counterirritation to the chest, and other appropriate medication. But it was not until the mild weather of spring was far advanced that these pulmonary irritations subsided, and that anxiety on their account was relieved. Nor was her general health and uterine functions restored with their subsidence.

In the month of June I found her suffering with great gastric irritation, attended with hæmatemesis. This state of things was followed by a train of inveterate dyspeptic symptoms, which lasted throughout the summer. She was greatly reduced in strength and flesh—in fact, with apthous ulcerations of the mouth and exhausting diarrhœa, she presented the phenomena of what is ordinarily called “chronic thrash.”

A variety of medicines, with rigid dietetic rules, were prescribed for the symptoms, but with very discouraging results until the heat of the summer had passed.

In the month of September, and under the internal use of crystal. nit. argent and morphine combined in pills, a marked improvement took place, which was confirmed by vegetable and mineral tonics and nutritious diet.

But in the latter part of October my patient presented symptoms which I do not recollect to have seen reported. I found her cheerful and with no physical distress, but there was a copious serous exhalation taking place from the epigastric region, so copious as to be visible in the wet state of her clothing. I was at first incredulous as to the source of this circumscribed exhalation, but was convinced, by ocular demonstration, of the fact. This symptom continued several days, and disappeared spontaneously. I regarded it as another form of vicarious menstruation. About a month subsequently to the appearance of this latter symptom, under the use of hip baths and mustard cataplasms to the mamma and thighs, with the internal use of ten grain doses of ergot, her menstrual function was happily restored—since which time she has had good health, and become the mother of two children.

I have thought this case worthy of report, on account of the obstinacy and variety of the symptoms presented.

If it is allowable to draw a general conclusion from any one man's observation, I should say that suppression of the menstrual function, with compensating hæmorrhages from other organs, is often fraught with serious consequences. I can look back upon quite a number of cases, in which was developed tubercular cachexy, with its inevitable results, and in which the first morbid manifestation was an apparently accidental interruption of the menstrual flow.

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### Paregoric Powder.

BY JOHN P. LITTLE, M. D. OF RICHMOND CITY.

I have used for some time past a preparation of paregoric in the state of powder, instead of always using it as a liquid. It is nothing more than the solid ingredients, which are used in making the camphorated tincture of opium, reduced to a very fine powder, and mixed intimately with prepared chalk and sugar.

Sometimes I have rubbed up oil of anise with the chalk, thus making the powder more closely to resemble the liquid paregoric. More commonly, however, I have added a drachm of powdered cinnamon instead.

This is the prescription as commonly prepared:  $\mathcal{R}$  Pulv. opii,  $\overline{3}$  i; pulv. cinnamon,  $\overline{3}$  i; acid benz.  $\overline{3}$  i; gum camphor,  $\mathfrak{D}$  ij; sac. alb.  $\overline{3}$  iij; cretæ prep.  $\overline{3}$  iv and  $\mathfrak{D}$  i. M. Fit. Pulv.

There will be one grain of opium in every drachm of the above powder—that is to say, one drachm of this preparation will be equal in anodyne properties to about half an ounce of paregoric, and one grain of the powder will represent four minims of the liquid. By bearing in mind, then, this proportion of *one to four*, the practitioner can easily proportion his dose to the character of the disease and the peculiarities of the patient.

This powder easily mixes with water, and owing to the quantity of sugar it contains, is readily taken by the child.

I question whether it would not be well to increase the quantity of benzoic acid in the above preparation. It acts upon the mucous membrane of the stomach and lungs, and has a very happy effect on the kidneys and urinary secretion.

This powder may be employed in all cases requiring the use of a mild anodyne, or wherever paregoric is commonly prescribed; and especially in those cases, frequently met with among children, where the stimulating properties of the alcohol render the use of the tincture of doubtful advantage.

The chalk is beneficial by its antacid property; and as will be at once seen, the compound of opium with chalk and an aromatic, forms a valuable medicine for the treatment of infantile diarrhœa.

It is in this class of cases especially that I have made use of it, combining it with calomel, or adding a larger proportion of chalk. I have found it one of the most efficient remedies ever used by me in the treatment of those troublesome diseases called summer complaints.

I prefer the use of it in place of the paregoric tincture, where it is necessary to soothe a child to slumber, who is suffering in cutting teeth, although it is necessary here to guard against any tendency to constipation, by adding rhubarb to the powder, or administering small doses of castor oil.

Indeed it may be added to many of the medicines which we are accustomed to give to young children, being used for instance as a carminative to render more easy the action of a purgative.

I have used it also for adults, in diarrhœa, &c. or wherever an anodyne antacid and carminative were required.

An objection to the use of liquid paregoric, that its strength may be increased to a very dangerous degree by the evaporation of the alcohol with which it is made, cannot of course lie against this preparation.

And if it be urged that paregoric, in powder, cannot be so conveniently given as paregoric in liquid, (the one having to

be weighed and the other being merely dropped,) it might be answered, that parents and nurses are too much in the habit of dosing young infants with this dangerous liquid, and that it is far better for the administration of opiates to remain in the hands of those who are qualified to use them.

Paregoric, Godfrey cordial, and all this class of anodynes, have slain more children than the wars of hostile nations have destroyed of men.

In preparing this powder, it is scarcely necessary to state that great care should be taken to see that the ingredients be finely powdered and thoroughly mixed.

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EDITORIAL.

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**N. O. Medical Journal on Medical Education.**

A LARGE portion of our editorial space has been heretofore appropriated to the discussion of the necessity of reform in the system of medical education in this country, and the failure of the national association to meet, in this particular, the expectation of its friends and the hopes of its founders.

Our remarks may have been as uninteresting to many as we know they have been distasteful to *some* of our readers. But to show that we are not singular in the views expressed, and that motives other than those of personal pique (as has been insinuated in our case) may have prompted to their expression, we shall devote our editorial pages in the present number, to the republication of the opinions of the New Orleans Medical and Surgical Journal on the same subject.

We are happy to find ourselves in such good company, and have no longer any apprehensions about the "scientific" character of our journal, since we find ourselves associated in opinion with Dr. Dowler of New Orleans.

The following may be found in the January number of his journal. We present it as already extracted to our hand by the American Medical Gazette :

"The original founders of the association saw, or might have seen, with regret, that the professors of the medical colleges were, in some instances, incompetent, (which, however, they scarcely whispered;) that these professors were either directly or virtually self-appointed and self-perpetuated; that they had a direct interest in lowering the standard of medical education, by making the way easy for a multitude of candi-

dates for the doctorate, which might have a pernicious influence so far as money can influence human action; that, having received the money of the candidate, and having the sole power of examining, and judging of his qualifications, they must labor under a bias; that a rigid examination, and a high standard of preliminary and professional education, would repel, and a low one attract students—a high one bring poverty to professors, a low one wealth—a high one send forth candidates stigmatized by rejection and hostile to the institution—a low one a multitude of graduates, friends and partisans. The association saw the country overrun with these incompetent physicians, holding diplomas, unworthily enjoying all the honors and advantages incident to the same, to the detriment of society and the degradation of the medical profession at large.

“Again—The late distinguished Professor Chapman, who probably examined more candidates, signed more diplomas, and made more money thereby than any other man in America, and who was the first president of the association which met at Baltimore May 2, 1848, opened the proceedings by giving utterance to the great, but, as events have since proved, Utopian expectations, saying:

“‘This assemblage presents a spectacle of moral grandeur delightful to contemplate. Few of the kind have I ever witnessed more imposing in its aspect, and certainly none inspired by purer motives, or having views of a wider range of beneficence. The profession to which we belong, once venerated on account of its antiquity—its various and profound science—its elegant literature—its polite accomplishments—its virtues—*has become corrupt and degenerate, to the forfeiture of its social position, and with it, of the homage it formerly received spontaneously and universally.* Do not suppose that I comprise the whole profession in this reprobation. There are numerous members of it who still retain the qualities by which it was formerly distinguished. It may, indeed, be affirmed that never in its history has it exhibited so many claims to respect as at this very moment. With the present century the spirit

of philosophy began to be infused into it, creative of real and substantial improvements in its theories and modes of practice, raising it from a low and conjectural art, to a place among the legitimate sciences, by which great good is already attained, and further benefit of inestimable value promised to suffering humanity. Nor have its disciples among us lingered behind in the career of reform and general advancement. Yet the preceding averment of the deterioration of the profession, in some of its features, cannot be denied. The truth of it, indeed, is everywhere recognized and proclaimed. Complaints, at first heard only in the murmurs of discontent, are now so loud, distinct and potential, as not to be disregarded or admit of further postponement. The commission which accredits you to this association sufficiently attests the tone of professional sentiment on the subject. Does it not declare the fact, that the profession is environed by difficulties and dangers, arising mainly from the too ready admixture into it of individuals unworthy of the association, either by intellectual culture or moral discipline, by whom it is abased? and are you not imperatively instructed to purify its taints and abuses, and restore it to its former elevation and dignity?

“Encouragement is also afforded to the hopes entertained of the success of our enterprise, by the firm, though moderate and dispassionate temper characteristic of the whole of our proceedings. We have been maddened by no extravagances of enthusiasm; no delirious hallucinations of imaginary perfectibility do we pursue. We are betrayed by no false lights—and seek, only as an attainable good, in soberness of thought, a reform in medicine, enacted by a proper regard to its future glory and usefulness. From slumbers too long indulged, the profession has at length awoken, and shaking the poppies from its brow, is recalled to a sense of what is due to itself, and the obligations it owes to preserve its fair heritage, to be transmitted to posterity unsullied, and without detriment or loss. Excited by this generous impulse, it comes forward in the majesty of its might to vindicate its rights and redress its wrongs. To no other tribunals does it deign to appeal for

these purposes. No mean petition of grievances, or supplicatory memorials for relief, or more immediate addresses to popular feeling to engage its favor, shall sully our proceedings. We have, in a spirit becoming our just pride, trusted, and will, I hope, continue to trust, our cause exclusively to the clear heads, the warm hearts and strong arms of the host enlisted in its service. We do not want, nor will condescend to accept of any extraneous assistance. Confiding in our own resources, we shall through them maintain the struggle till conducted to victory and triumph.'

"Dr. Wellford read a report from the committee on medical education, which, among other resolutions, embodied the following :

" 'Resolved, that this association recommend to the faculty of each medical school to conduct the final examination of candidates for the diploma, in the presence of some official person or persons properly qualified to recognize the attainments of the candidate, but who have *no pecuniary interest* in the institution, or in the number of its pupils.'

"Again—in the second volume of the Transactions (of nearly 1,000 pages) the association reiterated its resolutions on medical education, 'requiring due preliminary education prior to graduation,'—denouncing '*private examinations for medical degrees*,'—recommending '*boards of examiners in each state*, to examine candidates for license to practice,' and whether 'they are familiar with the elementary branches of general knowledge,' &c.

"The special committee of 1849, on the prolongation of the courses of medical lectures to *six months*, repeated the fundamental doctrines which called the association into existence. This committee (Samuel Jackson, John L. Atlee and Alfred Stillé) made the following statement:

" 'The medical profession was deeply impressed with the belief that it had gradually become lowered in its standing. It no longer occupied the high position in public confidence that was once accorded to it. Everywhere it met with successful competition from empirics and pretenders; while

absurd, fallacious and dangerous doctrines were countenanced not by the ignorant and vulgar alone, but by the educated and intelligent. It was not difficult to trace this abasement of the profession to its true cause. It had ceased to be a highly educated class. In its ranks were found those not only devoid of all pretensions to general science, but many who were absolutely illiterate. He must have occupied a low station indeed, who could not produce the evidence of a diploma. The parchment, refused in one quarter, could be procured from another. To the imperfect and restricted courses of the schools, and the low standard for medical graduation, were attributed the superficiality and the degradation of medicine. Dissatisfaction pervaded the profession, and distrust of the profession spread throughout society. The barriers that separated the cultivated physician from the rude pretender and empiric, were broken down. Before the community, they stood on the same level, bore the same title, and presented the same outward attributes of professional knowledge and skill.

“Such was the feeling on this subject, possessed by the profession throughout the country, that no sooner was the tocsin struck, in a distant and obscure village, by an earnest heart and hand, than it was responded to throughout the land. A wide-spread movement of the profession took place. From that movement this association had its origin. It stands, in some measure, *pledged to accomplish a reform in the medical education of the country*. Should it pass by, or fail to render effective, this leading idea of the profession, it will have neglected a chief object of its institution, and will disappoint the just expectations of its founders.’

“These views have been reiterated, from year to year, in the meetings of the association, in different forms, in varied expressions, but with diminished energy—if energy can by possibility inhere in ‘stale, flat and unprofitable’ words—stereotyped resolutions, which no one expects to be carried into effect, and which, if about to be effectuated, would be voted down by the many who seem to acquiesce (in the reforms

which have been *agitated*) so long as the association amuses itself with wordy potentialities—abstractions which have no tangible eventualities—theories that have no practical results.

“The last attempt to galvanize the ghastly corpse of reform has just been made by Professor Cabell of the University of Virginia, in his report, as chairman, on medical education, for 1854 :

“‘The evil in question originated, in a great measure, in the active competition of rival schools. Some have contended that it can only be remedied by diminishing the number of these institutions. If this were so, we should be obliged to abandon all hope of relief, and submit to a perpetuity of disgrace ; for those institutions now possess chartered rights, which it cannot be expected that they will relinquish. Nor is it probable that more good than harm would ensue from a diminution of the number of schools. If students could obtain admission into the ranks of the profession *only* after giving such satisfactory proof of attainments and mental discipline as would test the thoroughness and the judicious character of the instruction they had received, the rivalry between the separate schools would consist in efforts to elevate the standard of medical education, by enlarging the curriculum with the progressive advancement of the medical science, and by perfecting the means of illustration and exact demonstration. *The only available remedy, then, in the opinion of the committee, is the establishment of boards of examination, distinct from the faculties of the schools.* It does not suffice to have a committee of the state society present at an examination conducted by the faculty of the school. The desideratum is to have a uniform standard throughout the Union, or throughout the limits of each of those states in which such a board may be appointed.’

“In the origin and progress of the association, there was, and there always will be, a fundamental principle—not the less potent because concealed—a mental reservation, which expediency sanctioned—a secret, which policy dictated—unwritten law, (*lex non scripta*,) which every professor and

every friend of the existing organization of the medical colleges carried in his own bosom, namely, that the association is, was, and ever will be, virtually in the hands of its most friendly enemies; friends nominally—enemies from the implied revolutionary nature of the reform movement—enemies who, as yet, have no interest or wish to declare themselves such—enemies whose ‘masterly inactivity’ proves their sagacity—enemies who must be enemies so long as *self-interest, ambition, power, fame and wealth* can influence human conduct. In a word, a reform in education must reach the *teachers*. Nor can seven years of professed diplomatic silence in their behalf, nor seven years declamation against the *ignorant students*, fortified by an annual battery of resolutions, change the nature of the case, nor ‘elevate the standard of medical education.’ The ‘outs’ will have to stay out, and the ‘ins’ will stay in, as long as possible. Circumstances of expediency, rather than inclination, cause the latter to become the allies of the former; so that the whole column of students will be enfiladed once a year with a *fusillade* of the most deadly resolutions by the allies.

“Moreover, the acquiescing—yet, inly opposing cohort of reformers, the right wing of the association, that is, the actual coalition, (not intending professors,) may think, and conscientiously too, that the behests of medical science and the well being of society can be more completely effectuated by the existing system than by the proposed reforms, which to them may appear altogether Utopian. So long as the association is, and continues to be, a powerless infant in their arms, silence is expedient—particularly as it regards the two fundamental points, namely, the mode of appointing professors, and the granting of degrees.

“It is true, that Dr. Chapman, when his cloudless sun was setting, after a long and gorgeous day, advocated ‘rotation in office,’ at the first meeting of the association. It is true, that Dr. Evans was so eccentric as to propose that professors should be appointed, as in France, by *concours*, which had always succeeded in obtaining the most essential point—that

is, able teachers. But would not a proposition to all the crowned heads of Europe, requiring abdication, and an open *concours* to all the world for the honors of the throne, be quite as acceptable to kings, as Dr. Evans' proposition to existing medical potentates and dynasties? It is true, that Dr. Hopkins proposed, and Professor Cabell has just been guilty of the 'damnable iteration,' (as Falstaff hath said,) that an independent and disinterested national board of medical examiners, separate from the colleges, should be established, for the granting of degrees; whereby it is self-evident that the dignity, power and prerogatives of professors would be completely merged and lost in that of private instructors, whose sole duties would consist in preparing their pupils to become candidates for degrees before a dreaded tribunal, beyond the control of the professor, and the tuition fees of the pupil.

"That, sincere reformers and dissatisfied aspirants will annually reaffirm the resolutions on education, or, what is the same thing, repeat the throwing of the tub to the whale, is as probable as it is unavailing. In fact, as already stated, the very first step towards reform—the qualification and appointment of professors—has been politely ignored, nay, culpably evaded, and is no longer a topic for a whisper, or even a resolution; the latter being reserved solely for the deficiencies of the pupil. A reform which begins with learners, instead of teachers, needs reformation. This method must be reversed; the latter will secure the former.

"The outcry against the graduates in medicine, for their destitution of elementary and professional education, might with perfect justice be at present applied to some of the *professors themselves*. The former represent the latter.

"The education question is, truly, a two-edged sword, equally dangerous to professors, as now created, and to candidates for degrees, as now graduated. What would be said of a medical student who should confer on himself the degree of M. D.? or, what is nearly the same, get a degree from a nominal board of trustees, wholly incompetent to judge of his qualifications? Some professors appoint themselves directly,

others indirectly, under the mask of a board of nonprofessional trustees, who exercise no control but a nominal one; and even this is expressly prohibited by law in some of the states, so that a vacancy cannot be filled until a nomination is first made by the actual professors of the school! There is, then, a parallelism but too evident, between the present defective method of making a professor, and the graduating of a student of medicine.

“Although the medical professors of the United States are, in many instances, equal to those of any country, yet, as a body, every candid observer must admit that they are pre-eminently chargeable with *charlatanic advertising*—which is not a whit less discreditable than that of the *nostrummonger* in the newspapers—as their annual announcements, setting forth the unrivaled advantages of their colleges and professional teachers, fully attest. But the most stupendous of all errors in teaching is that common to both professors and pupils, namely, the boasting of the number of students in attendance; in as much as this is a fundamental evil even in a common school, where the instruction is verbal, and not demonstrative, as all sound medical teaching must be. Of five or six hundred students in one class, not half of the number can see a surgical, chemical or anatomical experiment! Other things being equal, the smaller the class, the better must be the opportunity of seeing, hearing, and learning. The propagation of this error has been found profitable, proving, as has been assumed, the superiority of institutions having the largest class! That this numerical argument may be satisfactory outside of the profession, and may even reconcile students to forego the advantages of demonstrative teachings, addressed to their senses of touch, hearing and sight, is as true as it is deplorable. Auscultation is demonstrative, and so is the science of obstetrics to a considerable extent, by means of apparatus, and by attendance during actual delivery. Materia medica has its specimens, pharmacy its preparations, chemistry its experiments, anatomy its dissections, disease its sensuous and material phenomena—all of which must be witnessed

in the concrete, not in the abstract—not simply read of, and lectured upon, without demonstration; and the greater the crowd, the smaller the chances of acquiring experimental knowledge of all these and other positive sciences, and practical illustrations of a thorough medical education.

“That a great number of the best informed parties believe, and sometimes give utterance through the medical journals to their belief, that the college catalogues fraudulently and falsely claim the benefit of this most numerical argument, is a truth altogether incontestible.

“At the moment of writing this page, the Nashville Journal of Medicine for December came to hand; the editor of which, Professor Bowling, and the assistant editor, Prof. Eve, (one of the ablest surgeons of the age,) say, ‘*The trickery and rascality of the matriculating books of medical colleges has become a by word.* Few physicians have any sort of faith in them. \*

\* \* It was then not a little provoking to hear, every now and then, after the publication of each catalogue, that such a one had said it was ‘a false record, and that he did not believe it,’ \* \* \* The adage, ‘*to lie like a college catalogue,*’ however true in its general application, is emphatically false when applied to ours, which is free of ‘dead heads,’ &c. Many of the catalogues have twenty per cent. of M. Ds.’

“The committee on medical education, (Drs. Stevens, Twitchell, Wellford, Naudain, Arnold and Bush,) at the second meeting of the American medical association, gave, in their report, the following opinion concerning this mode of tuition: ‘In the United States alone is continued an obsolete system of teaching demonstrative science by description—of teaching the manipulations of surgery, and the art of recognizing and healing diseases without exhibiting the practice of either, and of explaining the movements and changes of living bodies to those who are ignorant of the laws which govern inert matter.’—*Trans. i*, 236.

“If, as some contend, the number of medical colleges be too great in this country, it is because they are situated in unsuitable places—that is, places where there are no large

hospitals in which medical, obstetrical and surgical practice is witnessed, and where the supply of dead bodies, for practical, surgical and pathological anatomy is deficient.

“Whether the committee on medical education for 1853 worshipped the rising sun, does not appear, though they ‘still harp’ upon the students of medicine, and assert that the ‘disparity’ between the schools in the United States and those of foreign countries is not in the teachers. The ‘disparity (they say) has no reference to our public teachers.’ The king can do no wrong. The eighth resolution of the committee is in the following significant words: ‘That measures be adopted to prevent the multiplication of medical schools.’ It is evident that a ‘multiplication of schools’ would *diminish the emoluments* of those already established. The Sorbonne declared that the king had a right to *all the money*. Thus the reform degrades the medical profession in the United States below that of every other country. It endorses the professors as equal to the best—opposes new ones as invaders

‘Of the right divine, to govern wrong.’

“In conclusion, the writer begs leave to say, that whatever errors of opinion or of reasoning he may have fallen into—whatever censure he may incur for giving expression to his honest convictions, he is unconscious of having been biased by any selfish or unjustifiable purpose, in the views he has taken of the polity and tendencies of perhaps the greatest medical association that has yet appeared in the history of medicine. Honored by this association as its chairman of the committee on medical sciences, at its meeting in Cincinnati in 1850, the writer’s connection with it is among the most pleasant *souvenirs* of his professional life. As a social and professional *reunion* of kindred spirits and great minds, its memories afford perennial delight. It has given impetus to the progress of medical polity and science; it exercises moral suasion rather than that of authority; it has brought together a bright constellation of intellect; cemented the bonds of friendship among good men and true—and, should it fail to

effectuate its original and grand finality—that is, a thorough reform in medical education—it will leave a luminous track of light in the moral firmament of the Æsculapian heavens, throughout the expansions of the republic.

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### SELECTED ARTICLES.

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ON THE MODE OF DEVELOPMENT OF TUBERCLE IN THE LUNGS IN CHRONIC PHTHISIS: ITS CONNECTION WITH FATTY DEGENERATION OF THE EPITHELIUM OF THE AIR VESICLES, AND ITS EARLY MANIFESTATIONS BY FATTY EPITHELIAL CELLS IN THE SPUTA—By C. Radclyffe Hall, M. D., F. R. C. P. E., Physician to the Hospital for Consumption, and to the Institution for Ladies with Diseases of the Chest—Torquay.

To ascertain with precision the earliest deviation from the healthy state in the part invaded by tubercle, is obviously a point of the highest interest and importance; and the difficulty of obtaining the information, at first sight, appears to be commensurate; for, when tubercle is already present, the condition of tissue which immediately preceded its deposition may have passed away, and when no tubercle yet exists, we cannot be quite sure that any would ever have ensued. This difficulty, however, diminishes when we consider that tubercle is deposited not all at once, but progressively; that it increases by accretion at its circumference; and, consequently, that the peripheric portion of a slow tubercle must be more recent than its centre. Certain differences in color and density are visible to the naked eye; and with the microscope we can readily discern that every tubercle of tolerable size presents a series of different appearances, as it shades off in irregular zones, from complete tubercle to healthy lung. Knowing that any given tubercle, if progressive, would have continued to enlarge by the peripheric addition of tuberculous matter, we have a right to infer that the condition of that part of it which is nearest to healthy lung represents the earliest local morbid change—the first step in that local process which ends in the formation of tubercle. At all events, we approach as nearly to the facts as the nature of the circumstances

will permit. It may be objected, that any given morbid condition around a tubercle may be the mere consequence of the morbid deposit already there, and so can indicate nothing respecting the phases of primary tubercular deposition. Even then we should learn the nature of the condition which favors increased deposit, after tuberculization has once commenced. But the objection can be disarmed of much of its force, for it is only valid provided the presence of inflammation, or that of any kind of heterologous formation indifferently, is adequate to produce a similar morbid condition: if not, then tubercle coincides with this condition, not because it is a mere morbid deposit in the lung, nor because of the inflammation which often accompanies it, but because it is tubercle. Now, we can show that mere inflammatory exudation, in a lung without tubercle, is not surrounded by a similar morbid zone intervening between the solidified and the healthy portion of lung; whilst tubercle which has not yet any inflammation around it, is. Then, again, we can show, that a morbid deposit which is neither inflammatory nor tuberculous—as, for example, the entzoic disease in the lungs of sheep—has no such morbid zone. On the other hand, in connection with tubercle, we find the same morbid condition in some parts of a tuberculous lung, which are not yet the seat either of tubercle or of inflammation; in the portion which forms the immediate margin of the tubercle; and, in the form of relics, in the mature tubercle itself.

Thus, one given morbid condition is found where tubercle does not yet exist, but where it would probably have ensued; and around existing tubercle where we know that more tubercle would have been formed; and vestiges of the same are met with amongst the elements of completed tubercle. All this suffices to prove, at least, an intimate connection of some sort between the condition in question and tubercle.

*Development of tubercle.*—Taking for examination any tolerably large distinct tubercle, we see with the naked eye that there is no abrupt line of demarcation between the healthy lung and the margin of the tubercle. A simple lens discloses further, that the tubercle has not any distinct and even margin at all, but has a jagged, irregular outline, from processes of tubercle jutting out into the surrounding lung. By means of the microscope we perceive that the edge of one of these jutting processes of tubercle is not the limit of the morbid change; but that what, on cursory inspection, appears to be not unhealthy lung, immediately bounding the real tubercle, is in reality diseased, though not tuberculized.

Tracing onwards from lung which has no abnormal appearance to the centre of a large crude tubercle, we find as follows :

1. The pavement epithelium of the air vesicles is more nebulous.

2. Each epithelial cell becomes enlarged, more cloudy, more prominent when seen in profile, and is studded here and there with oil dots.

3. The epithelial cells become still larger, and more fatty. In many of them no distinct nucleus can now be made out, but large dots of oil occupy its place. Some of the cells are detached, leaving the wall of the air vesicle in one part bare, in another coated with compound tubercle cells. These are the preliminary stages of tubercle.

4. We now arrive at the completed tubercle, which consists of compound tubercle cells, small free nuclei in abundance, and granules ; and occasionally, in addition, of a few fatty epithelial cells in various stages of disintegration ; all being held together by a tough matrix.

5. So far, the deposit has been confined to the interior of the air vesicles. It now invades the intercellular tissue of the lungs. For the first time we find tubercle corpuscles amongst the fine fibres which form the frame work of the walls and septa of the air vesicles. These fibres are here and there seen to be broken into lengths, and the entire tissue of the affected lung has become the seat of tubercle. In the first stages, tubercle is only intra vesicular ; at last, it is both intra vesicular and interstitial. But it is to be remarked, that distinctly cemented in amongst the pulmonic fibres, we never find any of the compound tubercle cells, but only the free nuclei and granules.

The steps of the local morbid process, then, appear to be these : Fatty degeneration of previously normal epithelium ; shedding of this ; its replacement by fresh epithelium, degenerate from the first, and rapidly becoming fatty ; shedding of this ; its replacement by large cells containing several nuclei : shedding of these, their replacement by free nuclei and granules, imbedded in a structureless matrix. Up to this stage the tubercle is intra vesicular only. The pulmonic fibres are next enclosed and separated by the morbid exudation, and free nuclei and granules are formed between and amongst them. The tubercle is now complete.

Tuberculization of the lungs thus commences as a degeneration of a normal tissue, proceeds as a production of this tissue in a depraved form ; next, as an exudation capable of following only the lowliest process of organization up to ma-

turity. Its ulterior changes from maturity, also, are those of the degeneration of a lowly organized product; but concerning these I have dealt elsewhere.\*

The structural representatives of these several stages, starting from normal epithelium, are the following, and may be considered in their natural order. They may not all be detectible at once in every mature tubercle, particularly if softening be commencing; but they are to be found in various proportions in the great majority of tubercles, provided we include along with the tubercle a certain portion of the pulmonary tissue around it.

Constant constituents of mature pulmonary tubercle at some period of its course:

1. Normal epithelial cells becoming fatty.
2. Fatty epithelial cells.
3. Many nucleated cells.
4. Free nuclei.
5. Granules.
6. Matrix.

Frequent constituents:

7. Small blood vessels in a state of fatty degeneration.
8. Red blood corpuscles, and orange brown pigment.
9. Black pigment.
10. Granule cells, and glomeruli.
11. Induration matter.

1. *Normal epithelium becoming fatty.*—The existence of an epithelium at all in the air vesicles has been questioned by physiologists of high repute, but is now very generally admitted. Blood corpuscles seen through the walls of the capillaries were indicated by Mr. Rainey as having possibly been mistaken for epithelial cells. Such an error cannot arise when the lung of a bird or of an amphibian is examined. The even oval outline of the large and clearly defined blood corpuscle is too distinctive. In the frog, the epithelial cells are coarser, dimmer, and more separated from each other than in the bird or mammal; having reference, perhaps, to the greater expansibility of the lung sac. In the bird, the cells run one into another at their margins, showing only a faint outlining as their mark of division. In man also, the outlines are less sharply defined than in most other varieties of pavement epithelium; but the flat cells are bounded by a dim line of

\* In the annual address in medicine for 1853, delivered before the members of the provincial medical and surgical association.

limitation. In appearance they are thin, almost transparent, and have a slightly nebulous, somewhat ill defined nucleus, very different from the bright, sharply cut nucleus of the pavement epithelium of the mouth, for instance. A nucleolus is not distinctly to be made out. In size and shape the cells vary greatly; smaller and rounder when young, they become rather longer, flatter, and more angular with age. Pentagonal, hexagonal or polygonal, with angles more or less acute or round, according to their mutual fitting into each other. Their general character is, that they constitute a fine, but dimly defined pavement epithelium of a single layer. Whether this internal cuticle undergoes any regular process of desquamation and reproduction in health, is unknown. In all probability, it behaves very much like the pavement epithelium of serous membranes, in being for the most part persistent, and only cast off and renewed when accidentally incapacitated. Like serous epithelium, too, it permits the transudation of a thin watery halitus, (with the especial addition, in its own case, of the gases of respiration,) whilst it prevents the passage of complete blood plasma, acting in this respect as a natural defensive coat of elastic cement.

When becoming fatty, the flat epithelial cells first appear better defined at their edge, and more nebulous at their centre. Next, they are larger, plumper and more distinctly separate one from another, though still adherent. Oil drops of different sizes spot the whole of the nucleus, which either stands out in relief as full of oil dots, whilst the surrounding portion of cell is only nebulous; or it is apparently converted into one large oil dot; or it is obscured or lost by general oil dotting of the entire centre of the cell, the marginal portion only remaining clear.

2. *Fatty epithelium degenerate from the first.*—Nearer to the tubercle than those air vesicles which are lined with normal epithelium, which is becoming fatty, we find other air vesicles containing a quantity of detached epithelium, yet still having an epithelial coat on their walls, presenting cells in various stages of fatty degeneration. Some of these are small and round, evidently young, yet fatty. In many, the nucleus is not fatty, whilst the cell is. In others, the whole is fatty, both cell and nucleus; the situation of the latter being still traceable by the clustering of oil dots there. Lastly, the fatty spotting is so universal, that nothing remains to indicate where the nucleus had originally been. Although we have no right to infer that all these forms may not be presented by

the original epithelium in different stages of fatty degeneration, it is certain that there are successive generations of epithelial cells which, almost from the period of their formation, begin to fattily degenerate, indicating a proneness from the first to fall into this kind of atrophy. In the first instance, the normal epithelium has existed indefinitely before it becomes fatty and is shed. In the last, the newly formed epithelium is unable to maintain a normal life for more than a brief period of uncertain duration; it early becomes fatty, even whilst its growth is yet incomplete, and doubtless is rapidly shed, to make way for a fresh tribe of increasingly degenerate epithelial cells.

I suspect that those cells in which we find the nucleus alone fatty, are the degenerated original normal cells; and that those in which we see the surrounding cells largely fatty, whilst the nucleus is less or not at all so, as well as those in which all is alike affected with fatty degeneration, represent the subsequent tribes of degenerate epithelial cells. As countenancing such an opinion, I may state that I have found the earliest evidence of morbus Brightii in renal epithelial cells discharged in the urine, in which the nuclei alone were fattily degenerated.

Passing by this supposed distinction, the fatty epithelial cells, taken indiscriminately, present considerable variety in appearance and size. The following may be given as examples—Fig. 4.

*a.* A middle sized, subangular, well defined plate, having a large oil globule in place of nucleus; the rest being merely nebulous near this oil globule, and clear near the circumference.

*b.* A rounder cell, either small or middle sized, having a large oil globule in place of nucleus, and remainder of cell dotted with oil dots of different sizes.

*c.* A flat cell, not generally fatty, containing two or three oil globules in its centre.

*d.* Flat cells of very irregular outline, having a large nucleus with central oil dots; rest of nucleus clear; cell around nucleus full of oil dots of varying size.

*e.* The same as the last, but whole of nucleus fatty, though still discernible.

*f.* An irregular cell, not at all fatty, but having very large nucleus dotted all over with fatty dots.

*g.* Flat cells of various but irregular outline, wholly fatty; nothing in place of nucleus detectible. Oil dots very variable in size.

*h.* The same as the last, but with a margin of cell all round, not fatty, but dimly clear.

*i.* Flakes of detached epithelium, showing the cells altogether fatty, having a subangular outline, still adherent at their edges; very varied in size and shape, but fitted one into another without any interval of separation.

*j.* Similar detached flakes, but the fatty epithelial cells more swollen, and, though still coherent, showing a linear interval of separation from each other, resembling in this particular the lung of the batrachian.

*k.* Fatty epithelial cells, apparently disintegrating.

In size, the fatty epithelial cells vary so considerably, that no standard can be given as the average. A very few may be found smaller than a medium sized normal lung epithelial cell: by far the majority are larger, and some much larger. The smallest and the largest are generally the least angular in outline; the one perhaps from youth, the other from distention. Still, singularly shaped cells, with abruptly cut margins, seeming to indicate that the cell has been partially disintegrated, are seen of all sizes.

Bronchial columnar epithelium is found freely in the several conditions of withered but not fatty; fatty and swollen; partly fatty and partly withered. In some of these detached bronchial epithelial cells the nucleus alone is fatty; or the columnar part alone is fatty; the nucleus being merely granular; or the whole is made up of oil globules of different sizes, no nucleus being left.

Of course, more might be observed on the minute differences presented, but the above may suffice to establish the fact that what is thus described really is epithelium in a state of fatty degeneration, and not any of the morbid cell forms which result from inflammation, and are generated in inflammatory exudation. In answer to the first question which is usually put, How are these cells to be distinguished from the granule cells of inflammation? it is to be remarked, that the easiness of making the distinction depends entirely upon the individual cells selected. A *young* gland cell in one viscus is very much the same in appearance as a *young* gland cell in another, however clear may be their ultimate distinctiveness at maturity. So, also, of pathological cells: one may find some specimens in every diseased product not distinguishable from others belonging to a very different disease. We are ruled by the form of mature cell which preponderates, and take that for the type. So here, by the same rule, we find certain cells which are so manifestly epithelial cells more or

less fattily degenerated, and we can trace such marked gradations in them, that we need feel no hesitation about our conclusion because a few of the cells, if taken alone, could not with certainty be placed in the same class. There is no room for doubting, for instance, the nature of a flake of pavement epithelium in which the cells still cohere and fit in by their edges, whilst they present various degrees of fatty degeneration. Neither can any doubt exist when we are viewing fatty columnar epithelium from the adjacent bronchi.

3. *The compound corpuscles of tubercle, or many nucleated cells.* These are large cells, which contain several separate nuclei. We do not find many of them in the mass of mature tubercle, and what there are lie here and there, and not in aggregated heaps. Neither do we find them in those air vesicles which are nearest to healthy lung. Here the epithelium is only fatty. But between the air vesicles which contain the fatty epithelium and those which are crammed with complete tubercle, these cells are numerous.

They were first described by Virchow in 1851, and by Van der Kolk in 1852. The former mentions "cells with five large, oval, granulated, nucleolated nuclei." The latter states that the cells nearest the wall of the air vesicle are the smallest, contain only one nucleus each, but when cast off increase greatly in size by the imbibition of fluid, and are filled for the most part with numerous nuclei. "The cells which are placed in the middle of the air vesicle are thus the oldest—i. e. they are farthest removed from its walls, longest exposed to the influence of the surrounding fluid, and thus, also, the largest." By both observers these cells are considered to be morbid epithelium; and by both the contained nuclei are believed to be set free by dissolution of the enveloping cell, and then to constitute the small cells described by Lebert and others under the name of tubercle corpuscles. For the further interpretations, somewhat differing, of the two authorities, I must refer to the only sources of my own acquaintance with them—the accounts severally given by Dr. Jenner \* and Mr. Paget.†

My own observations lead me to conclude—1. That the many nucleated cell may be found of the largest size, and containing its largest number of nuclei, whilst close and adherent to the wall of the air vesicle. 2. That no successive strata of cells, becoming more and more nucleated as they ad-

\* British and Foreign Medico-Chirurgical Review, vol. xi, p. 186. 1853.

† Ibid. vol. xii. p. 196; and Lectures on Surgical Pathology, vol. ii, p. 595.

vance free from the wall towards the centre of the air vesicle, can commonly be made out. 3. That no distinct lamination of cells of any kind upon the wall of the air vesicle, as if they had been thrown off in successive and distinct layers, is observable. 4. That cells equally large, equally centric as regards the air vesicle, are numerous, in which either only one nucleus, or none at all is discernible, the whole being in some stage of fatty degeneration. 5. That a rather small cell may contain several nuclei, whilst one much larger, as just remarked, may have only one. 6. That whether or not the nuclei of the many nucleated cells, if set free, would be identical with the free tubercle corpuscles, they are not the principal, still less the only, source in which these originate.

The many nucleated cells, or compound corpuscles, are darker than any other of the cell forms seen in examining tubercle. They have often a clouded, yellowish brown aspect, and at first glimpse are readily mistaken for large glomeruli. They are usually plump and roundish, ovoid, or pyriform, and strikingly differ in appearance from equally large, but flatter and more or less angular, epithelial cells, which are only fatty. Their nuclei lie at different depths, and cannot all be seen distinctly at once. Distinct and in sharp relief, indeed, it is only by chance that any of them can be seen, owing to the dense nebulousness of the cell in which they are contained. So far as can be distinguished, these nuclei, whilst within the cell, are ordinarily larger, plumper, and more regular in outline than free tubercle corpuscles; they look less hard and compact, and their granules less distinct. Occasionally, however, we catch sight of one close to the wall of the containing cell, which appears to resemble closely an ordinary free tubercle corpuscle. And, in examining large miliary tubercles, gray throughout, I have sometimes seen a faded, shriveled, flat, semitransparent cell, no longer granulous, in which lay three distinct very characteristic tubercle corpuscles—Fig. 6. This I took to be a compound cell, on the eve of dissolving and setting free its nuclei. It is not unfrequent for one of the nuclei in a compound cell to be larger than the rest, and to possess a nucleolus. There may even be two nucleolated nuclei side by side in an oval cell, contained within a large compound cell having the ordinary nonnucleated nuclei. This form is rare. I have only found it in the highest type of tubercle, viz: the gray miliary, with fibrillated matrix—Fig. 6, *d*. Usually, there is only one nucleolated nucleus in a compound corpuscle, however numerous the fellow nuclei may be. This nucleolated nucleus may be supposed to represent the original nucleus of the

epithelium cell; the remaining nonnucleated nuclei being formed secondarily, as the cell increases in size, from mere corpusculation of plasma imbibed whilst the cell is still adherent to the wall of the air vesicle. Whether such growth of cell, and multiplication of nuclei within it, also go on after detachment from the wall of the air vesicle, cannot, I believe, be decided either way by anything we can find on inspection. If the cell can grow after severance from the place of its birth, or if it be, from the time of its detachment, large enough to swell out by mere imbibition, there is no reason why the imbibed plasma should not corpusculate as readily on the inside as we find it does in the matrix on the outside of the cell. There is no ground for supposing, in any case, that the several nuclei result from fission of the primary nucleus, since that, as already noted, is very often still present and increased in size. I suspect that most of the compound cells complete their development whilst still adherent, and only increase in growth subsequently.

This compound cellulation is by no means peculiar to tubercle. In a more marked form, it is common in cancer; but, in very similar form, it may be met with in the cheesy secretion of the tonsils—in that of a sebaceous follicle—in healthy granulations, both in man and animals (on a horse's broken knee, for instance)—and in the plastic exudation surrounding the entozoa so constantly present in the lungs of sheep. Neither is it essential to tubercle. In a thoroughly tuberculous subject, in the midst of a thick adhesion, which connected the base of the left lung in front to the diaphragm, I found three triangular portions of true adipose tissue; and in the centre of each a distinct crude tubercle. In each of these tubercles, characteristic free corpuscles and granules set in their matrix, formed the entire mass. There was not a compound corpuscle in any one of the three tubercles. Evidently, the course of events had been this: The lung, having been made an abnormal fixed point, by adhesions and tuberculous consolidation occurring at the last stage of phthisis, the diaphragm had had a tendency to drag asunder the newly formed adhesion matter. As this opened out into areolar tissue, fat was deposited; and into this loose fatty areolar tissue, plasma subsequently found admission, and corpusculated *more suo* into yellow tubercle. There was no epithelial surface engaged, and there were consequently no compound cells. So, likewise, when pulmonary tubercle has become interstitial, we do not find the compound tubercle corpuscle amongst the lung fibres. Neither do we find it in subperitoneal tubercles. As Virchow (and also, I believe, an English pathologist of

equal eminence) has found the many nucleated cells constantly in tuberculous lymphatic glands,\* we may perhaps infer that, although not essential to tubercle, and consequently not the crucial fact of its occurrence, this compound cellulation is still an habitual feature of tuberculization at some stage *when it attacks an epithelial surface*, such as that of the lungs and of the lymphatic glands. That this circumstance is due rather to the accident of place, than to the kind of morbid crasis on which the disease depends, is deducible again from the fact, that the typhous matter in Peyer's glands occasionally presents a similar phenomenon, amongst its several other points of resemblance in microscopical appearance, to the lower forms of tubercle.

It might be a question whether all of the compound corpuscles of tubercle do originate as described, acting as parent cells to endogenous nuclei. Whether in some of filmy appearance, and which are devoid of any nucleolated nucleus, the free nuclei were not the first in the field, becoming secondarily enveloped in a film of plasma whilst in contact with the wall of the air vesicle: just as we see shriveling blood corpuscles become thus encased on their way to form pigment cells.

We may fairly assume that the formation of the many nucleated cells, whether it take place in one, or other, or both these ways, implies the exercise of more organizing power, and therefore the presence of greater vitality in the parts than does the production of free nuclei only.

4. *Free nuclei, or tubercle corpuscles proper.*—These are the small single cells which make up the bulk of every variety of mature tubercle. In appearance they are irregularly round, oval, or oblong; or bean shaped, or polyhedral, or altogether irregular; but always without sharp corners; their shape varying apparently according to their age, the kind and condition of tubercle, and the degree of pressure from close packing to which they have been subjected. They are more regular in figure in the jelly-like tubercle occasionally found in the most acute forms of phthisis, in gray miliary tubercle, and in yellow tubercle just beginning to soften; and most rounded and plump when softening has fairly set in. Least regular, in friable yellow tubercle, when it is commencing the process of dry obsolescence. They have a sharp, compact outline, are semiopaque, and contain several very distinct dispersed granules, but commonly, no separate and definite

\*My own observations have been almost limited to tuberculized bronchial and mesenteric glands. In these, I have always found some compound cells.

nucleolus. In size, they vary very considerably from that of a very minute cell, speckled with molecules, up to that of a pus corpuscle. The great majority are rather smaller, regard being had to their constant difference in figure, than a red blood corpuscle. They are consequently the smallest of the typical pathological cells—exudation granule cells, pus cells, and cancer cells, *when fully developed*, being usually much larger than these tubercle corpuscles. Those are also, all of them, nucleated cells, the unnucleated specimens being the exceptions. Tubercle corpuscles, on the contrary, as a rule, are not nucleated, (or nucleolated if we name the corpuscles themselves nuclei :) those which are so, are the exceptions. As they have not the size, neither have they the plump rotundity of most of the other morbid cells in their perfect state. Still, the tubercle corpuscle is not a shriveled, withered looking cell ; but gives one the impression of its being a small, tough cell, which has grown up to its present size and figure, and could not grow beyond it ; and not of a cell which has passed through a higher stage of development, and is now going down by some kind of degenerative process. In this respect it differs entirely from shriveled up inflammatory granule cells, or old pus cells. These may have assumed the small size of the tubercle corpuscles, and have lost their roundness ; but then they look shriveled, and have an uneven irregularity of outline ; whereas the tubercle corpuscle, whatever its irregularity of outline, is even, and shows distinctly the few rather large granules within it, and never looks muddy or clouded with minute molecules. Moreover, after swelling them out with water, and using diluted acetic acid, a nucleus can ordinarily be made out in the other cells, however shrunken they may be : it cannot, generally, in tubercle corpuscles.

The granules contained in a tubercle corpuscle, prior to the period of softening, cannot be made to move about within the corpuscle by any mode of manipulation. It is hence inferred that the corpuscle is filled, not with fluid, but with solid matter, which is identical, in all probability, with the external matrix.

Tubercle corpuscles may be defined as small, irregular shaped, well defined, semiopaque, motionless granule bearing, unshriveled, nonnucleated cells. Only one other kind of morbid cell could be included under this definition, and that is the cell more sparingly found in typhous deposit.

*Nucleated cells.*—Cells which contain a distinct nucleus are found more or less abundantly in many tubercles. The following variety may be noticed :

*a.* A small roundish or oval cell, neither granulous nor fatty, having a bright oval vesicle in its centre.

*b.* Cells containing distinct granules, and only distinguished from the common tubercle corpuscles, in that they are longer and more regular in shape, and present a round or oval nucleolated nucleus.

*c.* Smaller cells than the last, bearing distinct granules, and in every respect like the free tubercle corpuscles, excepting that a bright vesicle appears within them, either at the centre or nearer one end—Fig. 9.

Are these and such like nucleated cells different stages of morbid epithelial cell, or of the tubercle cell, or of some superadded inflammatory granulous cell, or of modified pus?

That they are neither inflammatory globule nor pus, is clear from their presence in unsoftened tubercle, and most abundantly in gray miliary tubercle, which has no inflamed lung around it. Before stating what they probably are, we must enquire into the mode of origin of the free unnucleated tubercle corpuscles. These are referred by Virchow and Van der Poik to the disintegration of the many nucleated cells having set free their nuclei, of which they are consequently the parent or brood cells. Some of the free corpuscles may originate in this manner, and may hence, with propriety, be designated free nuclei; but all, and probably the greater number, can scarcely so originate; for, we find the characteristic tubercle corpuscles in masses in which no many nucleated cells exist, and, as far as can be ascertained, never did exist—e. g. in the instance of tubercle in adipose tissue, already mentioned—figs. 7 and 8—and in the interstitial part of the deposit in pulmonary tubercle—fig. 2—and in subperitoneal tubercle: and we also find miniature specimens in all degrees of the free corpuscle, smaller than we can ever make out amongst the nuclei contained in the large compound cells. These are not to be looked upon as young cells which would afterwards have developed into larger free nuclei, but as such nuclei made very small at first.

I would suggest the following explanation: The vitality of exuded plasma is partly inherent, partly dependent upon the adjacent living structure. When tuberculous plasma is exuded upon a surface whose normal office is that of forming epithelium, its subsequent cellulation follows, as far as its own defective capability permits, the type of epithelial cell formation; presenting, as the result, numerous aberrant forms of nucleolated nucleated cell, or merely nucleated cell. When such a cell is small, and contains a few granules, it constitutes what

has been described as "a nucleated tubercle corpuscle." But when tuberculous plasma cellulates at a distance from the wall of the air vesicle, it forms only that kind of lowly cell which its own unassisted capacity permits—and that is, the unnucleated tubercle corpuscle. And when, under the progress of disease, the pulmonary tissue has had its vital force too much impaired to afford anything towards organizing tuberculous plasma into its higher corpusculate forms, then, also, the exudation, although close to lung tissue, may generate only the unnucleated corpuscles. Moreover, as all plasma will corpusculate when exuded, and as the resultant corpuscles will tend towards nucleation, in proportion to the goodness of the plasma, it is possible that some portion of the plasma poured forth in a phthisical subject may have the capacity within itself of forming small nucleated cells amongst the elements of tubercle, irrespective of any influence of the pulmonary tissue. In either case, the presence of nucleation may be taken to indicate a higher measure of vitality, or organizing force, in the tubercle cells which possess it than in the rest.

Such of the nucleated corpuscles as may originate in the way we assume, are not retrograde, nor degenerating, nor even tubercular epithelial cells, strictly speaking, because they have never been developed higher than we now see them. But at their origin, they may be said to have inherited a tendency towards the type of epithelium, although they never fulfill it.

Other tubercle cells may be nucleated in virtue of inherent capacity of plasma: these, probably, are the rarest. Some, again, are probably nothing more than the nucleolated nuclei of former compound corpuscles set free by disintegration. The diversity in appearance presented by the different forms of nucleated cell in tubercle, quite countenances the supposition that there may be several modes of origin for them.

The nucleated cell is not essential, or even in any sense characteristic of tubercle, for it is not always present; and seldom abundantly so, except in certain specimens of fibrillated gray tubercle. But it does not follow that when present, it is not equally one of the elements proper to tubercle as any other.

The small nonnucleated cells, free nuclei, abortive cyto-blasts, or tubercle cells proper, may be looked upon, with Lebert, as the especial characteristics of tubercle. In variable proportion, they are to be found in every tubercle; and if they were not also met with in typhous deposit, might be considered as the pathological element which was peculiar to tu-

bercle. In typhous deposit, however, these corpuscles do not constitute the bulk of the exudation; molecular detritus in abundance, a few compound cells, and a few of these free nuclei, are mixed up together in a less firm matrix. Whereas in many tubercles, these corpuscles, set in a tenacious matrix, are the predominating elements.

Of these tubercle corpuscles, some are probably nuclei which were formerly contained in a brood cell now dissolved away; but the majority have been self-originated in an exudation of tuberculous plasma. Excepting tuberculous plasma, no other kind has the tendency to generate in abundance free unnucleolated nuclei like these. In common inflammatory exudation, we may find a few young cells not nucleated, but they are either round, or oval, or shriveled; and in degenerated inflammatory cells, as already remarked, a nucleus may generally be detected. In cancer, here and there, a free nucleus might be undistinguishable from a tubercle corpuscle, but there are always many other cell forms in greater quantity. Any deposit, of which the *greater portion* consists of free nuclei answering to the description given, may be justly considered to be tubercle.

Whatever may be the resemblance between various other morbid deposits, when in a state of degenerative change, and tubercle, in their typical condition, all of them can be distinguished from tubercle, and *vice versâ*. There is, therefore, no evidence whatever, that any exudation which was not stamped as tuberculous at the first, can ever change into true tubercle subsequently. It may certainly soften and lead to ulceration, and pursue, in other respects, much of the course of tubercle, and end in the same way; but all that does not establish identity of nature.

5. *Granules*.—The free granules are too minute for any structure to be discerned in them. They are irregular in shape and size, but always exceedingly small, and are probably nothing more than aggregations of atoms, without any definite arrangement. From their reactions, it is concluded that some are fatty, others albuminous in composition. They are comparatively few in gray miliary tubercle; in the ash colored, jelly-like tubercles of some cases of acute phthisis; abundant in the yellow tubercle of acute phthisis; in cheesy tubercle generally; and in destructive softening in all stages.

Are these free granules the detritus of pre-existent corpuscles, or primordial elements of tubercle? Probably both. As they are less abundant in young, and more abundant in old, degenerating tubercles, there is some reason for viewing

them as in part the remains of corpuscular elements which have undergone disintegration. On the other hand, they abound in one degenerate form of tubercle at its earliest stage, viz: in the small yellow deposits of acute phthisis, where there has not been time for corpuscular disintegration to have taken place; and where we must consider the free molecules as primordial. We find, moreover, in this case, both the albuminous and the fatty molecules, and cannot therefore view the one variety, rather than the other, as the result of disintegration. So much of the plasma as can neither corpusculate into cells, nor coagulate into mere matrix, nor be absorbed, probably granulates into these minute molecules.

6. *Matrix*.—If we move about the tubercle corpuscles under the microscope, we see that they are held together by something which is transparent, homogeneous, structureless; which in the yellow tubercle presents no appearance of fibres or of fibrillation, and has no adherent nuclei; but, in the well defined gray semitransparent tubercle, is finely fibrillated. In the mature tubercle, this matrix is firm and solid; in the small gray miliary tubercle, it is as resistant as foetal cartilage; in the recently formed tubercle of certain cases of acute phthisis, it is less firm, and is sometimes found of the consistence of tough jelly; and in softening tubercle, the matrix gradually loses its tough consistency, and finally becomes liquid.

7. *Small blood vessels in a state of degeneration*.—I have hitherto found these once only in large gray semitransparent fibrillated miliary tubercles, which lay as distant nodules in uninfamed lung.\* Near to the portions of fattily changed vessels, shriveled red corpuscles, and orange as well as black pigment lay amongst the tubercle corpuscles in the tenacious fibrillated matrix. The tubercles were of larger dimensions than miliary tubercles ordinarily are, averaging the size of duck shot, and including, of course, within each many air vesicles. The fatty blood vessels were unmistakable, presenting a clear, defined outline, dividing into branches of considerable length, and having no openings or connections with the adjoining elements. The centre of the vessel was bright and translucent, and the whole studded with dim granules and oil dots of various sizes. The patient had

\* I have also found fattily degenerate blood vessels in the walls or large cavities, and occasionally shreds of the same amongst the contents of closed cavities.

suffered from copious and repeated hæmoptysis two years before his death.

Considering how many cases of phthisis spring into noticeable activity coincidentally with an attack of hæmoptysis, the patient so commonly declaring that his chest was strong and his health good until suddenly he "broke a blood vessel," which led to consumption; this fact of fatty degeneration of small blood vessels, where no inflammation exists, at the earliest stage of the highest form of tubercle, whilst as yet it occasions neither pain nor organic irritation of the lung, is valuable and explanatory. No doubt such a degenerated vessel, under some temporary muscular exertion or mental excitement, does literally "break," and the flow of blood is then a veritable hæmorrhage from a patulous vessel, and not a mere transudation, like that through the mucous membrane of the stomach in coffee ground vomit. If so, the popular phraseology is correct.

I have never found blood vessels in a yellow tubercle; and these fattily degenerate vestiges in certain gray tubercles evidently represent the blood vessels which originally belonged to the lung, and not vessels newly formed because of, or in any sense belonging to, the tubercle.

8. *Blood corpuscles, and orange and brown pigment.*—Red blood corpuscles unchanged are not common in tubercle; but a few shriveled ones enclosed singly, or in small clusters of three or four, in a filmy envelop, are usually to be found. Yellow, orange and brown cells may be traced to consist of such cellulated blood corpuscles undergoing solution and changing color as the disintegration proceeds.

9. *Black pigment* in granules, either free or else contained within a nucleated cell, is common both in and around tuberculous deposits, and abounds in direct proportion to their chronicity. Seeing the gradual alteration in the appearance of the enveloped red globules last mentioned, and noting that black pigment is normally found on vascular surfaces, where there appears to be a special provision for rendering the circulation sluggish (e. g. the black pigment on the choroid with its *vasa vorticosa*;) and, abnormally also, chiefly in parts which are very vascular, and in which there is a tendency to obstructed circulation (as in tuberculized lungs, infarcted bronchial glands, and soft cancer, which does not discharge its blood by external hæmorrhage;) it is difficult to avoid the conjecture that altered red globules constitute the material out of which the black granules are formed by a process of

disintegration, and subsequent molecular attraction, after their enclosure in a cell. This pigmental degeneration may be taken to indicate chronicity in the disease, and tendency to local stagnation of blood.

10. *Granule cells*.—The large round or oval cells, full of small similar sized granules, so constant as a consequence of inflammation, are very common in and around tubercle. They abound in exact proportion to the extent of inflammation, of which, indeed, they are a principal measure. The only form of tubercle cell with which, when very large, they may readily be confounded, is a compound corpuscle, too granulous for its several contained nuclei to be easily distinguished.

11. About and around the seat of tubercle, the lung tissue is generally more or less consolidated by induration matter. Tough, glazy and firm, it presents, variously amalgamated, the nuclei, nucleated cells, and fibres of common plastic induration matter, together with the characteristic free nuclei of tubercle.

Other constituents of tubercle and its boundaries are met with, but they belong to the ulterior changes which constitute the conservative and destructive courses of tubercle, and are elsewhere more fitly noticed under those heads.

*Sputa*.—If such be the real course pursued by the local disease, we shall naturally expect to find some evidence of fatty epithelial cells being cast off from the air vesicles in the expectoration at the commencement of the phthisis. This corroboration is not wanting. I have made careful examinations of the sputa in cases in which the deposition of tubercle appeared threatening, but in which no auscultatory proof was detectible; in cases of phthisis, in its earliest confirmed stage, and in others where the disease was of old duration, and in its third stage. The following is the sum of these observations on the sputa in impending, incipient and established phthisis:

*Common to all*.—Flat pavement epithelium, with sharp clear nucleolated nucleus, entire or partially dissolved, from mouth or pharynx. Bronchial columnar epithelium. Filmy cells, containing two or three dim granulous nuclei from tonsils. Pigment cells.

*Impending tuberculization of lungs*.—Expectoration gray, glairy, adhesive; brought up chiefly when dressing in the morning, and scarcely noticed or thought of by the patient.

If innocent, (which of course it generally is,) it consists merely of round nebulous mucous corpuscles, in transparent adhesive mucus. If threatening, it contains, in addition, single plates, or small flakes of flat epithelium from the air vesicles, fattily degenerating; and bronchial columnar epithelium, also presenting various degrees of fatty degeneration.

*Incipient tuberculization.*—The same as the above; and, in addition, red blood globules, more or less shriveled and faded, enveloped in a filmy cell; a few large many nucleated cells; granules; and frequently small casts of air vesicles and the ultimate bronchi, in which are plainly visible epithelial cells in various sizes and various stages of fatty degeneration. So constantly have I met with enveloped blood corpuscles in sputum which betrayed no appearance of blood to the naked eye, that I suspect that this microscopic hæmoptysis is seldom, perhaps never, altogether absent in those cases of commencing phthisis in which the more obvious expectoration of blood is wanting.

*Established phthisis.*—The same as the last, largely mixed up with corpuscles of pus and mucus. Free tubercle nuclei occasionally in small quantity.

*Large suppurating cavities.*—Absence of specific tubercle cells, excepting portions of opaque tubercle itself, happen to be expectorated. Habitually, little else than pus and mucus, and large granulous cells, unless confervoid vegetations be superadded, which is not unfrequent.

The microscopic appearances presented by the expectoration are most special and characteristic in the early stage, when other physical evidence is least marked; and may be re-enumerated of fatty epithelial cells, single or in patches, fatty bronchial cylinder epithelium, casts of air vesicles, lined with fatty epithelium, and microscopic hæmoptysis—i. e. enveloped red blood globules. These are enough to indicate that consumption is threatened. When the many nucleated cells and special free nuclei of tubercle are superadded, no doubt can remain. All these I have repeatedly found in cases where the patient was not apprehensive of phthisis, but complained only of general malaise or dyspepsia, as well as in other cases in which consumption was feared, but was not supposed to be yet in active existence.

*Theory of the local part of the disease.*—The natural defensive epithelial coat of the air vesicles is unable to maintain its

own nutrition, and slowly falls into a state of fatty degeneration. It is then thrown off, and is succeeded by fresh epithelium, which is badly organized from the first, and quickly becomes degenerate and shed. This process of fatty degeneration and shedding may, perhaps, go on for some considerable time without further local disease; and we do not know but that it may happen in occasional instances, where the persons affected have their general nutrition by some means so much improved at this juncture, that good epithelium is once more laid down. This is quite conjectural; but if it ever do occur, such persons have been on the eve of becoming tuberculized, but have escaped. Ordinarily, after an uncertain number of desquamations of fatty epithelial cells, the surface of the air vesicle forms cells which contain separate granule bearing nuclei. In due course these also are shed and probably some may grow larger after their shedding. A variable number of crops of these compound corpuscles may succeed each other, according as the wall of the air vesicle maintains, for a longer or shorter period, sufficient organizing power to make them. The wall eventually becomes bare in places, and the albuminous part of the *liquor sanguinis* has no longer anything to hinder it from escaping into the air vesicle. It does so escape; coagulates and corpusculates into such small, compact, and for the most part nonnucleated cells, as its feeble organic force permits; and these are the free nuclei, or tubercle corpuscles proper. That portion of exuded plasma which is unable to perform even this feeble act of development, falls into amorphous granules. The adjoining air vesicles, under a continuance of this process, are crammed with desquamated cells, and with tuberculous exudation. By the resultant pressure, the remnant of vitality which the enclosed intercellular pulmonary tissue (viz: the septa and walls of the air vesicles) retained, is still more impaired; exudation infiltrates amongst the pulmonic fibres, and corpusculates in their interstices into the free nuclei, but not into the many nucleated cells. The tubercle is now complete. Up to this time it may have been unattended by inflammation, or inflammation may have attended its course throughout.

The relation of inflammation to tubercle is far too important to be cursorily dismissed, and is discussed at length elsewhere.\* I will merely state dogmatically here that tubercle *may* pass through all its stages *except the destructive ones*, without the coincidence of anything which we can justly term inflammation. But, on the other hand, it seldom does. Tubercle may commence with inflammation, or be quickly followed by it. In-

\* Loc. cit.

flammation—in short, may step in at any stage, and almost invariably does step in at some stage, and is a necessary antecedent to the fatal issue of softened tubercle. Inflammation practically, therefore, exercises the greatest influence upon the course and termination of tubercle.

If we choose to say that when pulmonary tubercle commences with pneumonia it has an inflammatory origin, there is no refutation at hand. But as tubercle is not *always* of inflammatory origin, it cannot be essentially an inflammation. It is rather always a degeneration, which has a very habitual relationship to inflammation as a concomitant.

The exudation poured out by inflamed blood into inflamed tissue either fibrillates into induration matter, or corpusculates into cells, for the most part round and nucleated, which become ultimately organized into tissue, or dissolved and absorbed, or changed into pus cells, according to circumstances; or else, the inflammatory blastema dies rapidly and at once. Tuberculous blastema does none of these after precisely the same type. And when tuberculous exudation is attended with inflammation, we find side by side the normal products of inflamed blood and the specific products of tuberculous blood. The two are not mutually convertible. It follows that either that part of the blood plasma which forms tubercle *cannot* undergo the changes of inflammation; or else, that when some of the blood plasma is inflamed another portion escapes the process, and is exuded in company with the first, to pursue afterward a distinct course. In either view, the distinction between tubercle and all the known products of inflammation is obvious. But it may be said, that tuberculous inflammation may be of a specific kind, leading to the specific product of tubercle. Not so: for we find the inflammation which attends tubercle is just like common inflammation in its course, and in its products. If, again, it be urged that part of the process may be common inflammation, and part specific inflammation, proceeding side by side in the same portion of tissue, this seems to be almost a *reductio ad absurdum*, since upon such terms every known disease might be called an inflammation.

*Natural alliances of pulmonary tubercle.*—Viewed in its two fold aspect, as primarily a degeneration of existing structure, and secondarily an exudation which corpusculates into very lowly organized cells, tuberculization of the lungs has a generic relation with similar morbid affections of many other organs. And such allied affection of any other viscus, when it happens to coincide with pulmonary tubercle, may be

looked upon as equally congeneric, whether it stop short at the stage of fatty degeneration, or pass on to that of tubercular formation. Hence, the frequent association of phthisis with fatty liver and fatty heart, and its occasional association with the fatty variety of Bright's disease. The occasional occurrence of this affection of the kidney, the more rare occurrence of apoplexy from fatty degeneration of the small blood vessels of the brain in persons of phthisical habit, but who are not the subjects of developed phthisis; and also the antecedence of general fatness of integument, the fat being less firm than that which indicates mere excess of good nutrition, in some persons who afterwards become phthisical, may point in the same direction. And several of the not unusual complications of phthisis, as well as some of its customary features, are possibly due to a similar kind of degenerative tendency. Thus, the thinning of the coats of the stomach which occasions the enlargement of that viscus in phthisis, though chiefly owing to simple atrophy of the muscular coats, may be in part also due to fatty degeneration. The hooked and clubbed nails, to fatty degeneration with enlargement of one portion of the bed of the nail. Scrofulous lymphatic glands, to enlargement, fatty degeneration and accumulation of lymph cells; or to positive tubercle; or to both, in different instances; inflammation being either coincident or absent. In like manner, the falling off of the hair, so common in females who are phthisical, (as well as in many others whose malnutrition arises from more innocent causes,) may greatly depend on fatty degeneration of the cells secreted by hair bulbs unfitting them for development after the existing hair is shed.

Upon these latter points (with the exception of the lymphatic glands) I have no certain knowledge; but reverting to the three instances in which the alliance is clear and sufficiently common—viz: fatty degeneration of heart, liver and kidney, there is more to be said.

Muscle is not liable to tubercle. We have, therefore, no difficulty in admitting that fatty atrophy of the heart, when it occurs in phthisis, may be directly related to the tuberculous disease, although tubercle itself is not found in the organ. The degree in which the liver and the kidney are prone to become the seat of tubercle is not quite established. All that can be affirmed is, that whilst they are occasionally tuberculized, they are much more liable to be merely affected with fatty degeneration. When so affected in conjunction with tuberculization of the lungs, we need not hesitate to admit a direct relationship between the several organs diseased, in re-

gard to the very essence of the disease. In the fatty form of Bright's disease, the similarity to the primary steps of chronic tuberculization of the lungs is particularly close, keeping in view the normal peculiarities of the two great excretory organs involved.

The lung is a chimney, which requires mere ventilation for carrying out its vaporous excretions. The kidney is a main sewer, always draining and periodically flushed. The internal surface of the lung keeps in all the blood except that portion which evaporates during its passage through the pulmonic capillaries. When, therefore, this surface has lost its natural defence, it does not instantly give exit to complete blood plasma in excretable quantity. If it does so, there is often a large pouring forth, the blood escapes entire, red globules as well as plasma, and we have hæmoptysis. But in the kidney the internal surface is normally accustomed to let out the watery part of the blood, and so, when bared of epithelium in places, it readily gives passage to a portion of fluid plasma, with or without some red corpuscles, and we have albuminous urine, with or without hæmaturia. In the lung, tubercle follows; as a rule, it does not in the kidney, perhaps for these reasons: So long as the plasma is periodically washed away with the urine, there is no material to corpusculate left behind; and when checked elimination of urine at length ensues, its consequences generally put an end to life too speedily to permit the question to be tested, not to mention the altered blood crisis then induced. Moreover, when tubercle is laid down in the kidney, its seat of election is the cortical parenchyma, and not the interior of the uriniferous tubes. And although the exact relation of tuberculous deposit to the minute structure of the cortex is not clearly ascertained at present,\* it is quite possible that the free discharge of albumen from one portion of the gland may oppose the formation of tubercle in the other.

As in chronic phthisis the earliest local process consists in the enlargement and fatty degeneration of epithelial cells, and more or less accumulation of these in the air vesicles; so also, in some cases in which, had the patient lived, he would probably have shown the customary signs of the fatty variety of *merbus Brightii*, do we find the uriniferous tubes so choked up with detached granulous and fatty epithelium, that the urine only filtrates through and carries no albumen with it. Such a condition we shall generally find after death, when, in

\* See, however, an excellent essay by Dr. Duncan, of Colchester, in the *Transactions of the Provincial Medical and Surgical Association*, vol. xvii, p. 113. 1850.

the last stage of slow phthisis, there is œdema of the lower extremities (irremovable by remedies,) without any albumen in the urine, but with a copious sediment of phosphates.

In practice we notice, in respect to this subject, three kinds of cases: the one just mentioned; phthisis with albuminous urine; and phthisis arrested, in which the patient dies at some future time of Bright's disease.

Is, then, in conclusion, tuberculization merely an advanced stage of fatty degeneration when this affects certain textures? Certainly not, since fatty degeneration is related to many other morbid conditions besides tubercle, and having little in common with it. But it may be, that it is a constant attendant upon tubercle; in which case we have a right to consider tuberculization as fatty degeneration *plus*—something else. If so, all that is known respecting fatty degeneration has a certain reference to the etiology and treatment of phthisis.

Not to occupy space by compiling information easily obtained from the writings of Mr. Bowman, Dr. Quain, Mr. Paget, and Dr. Handfield Jones, I will merely state here that I have succeeded on a large scale in inducing fatty degeneration of various viscera, by keeping animals under such conditions as entailed mere inactive discharge of the functions of these viscera.

Neither is tubercle in the lungs the necessary consequence of shedding of the epithelial cells in the air vesicles, and of subsequent exudation of plasma; for this occurs to some extent in simple pneumonia, and to a much larger extent in the intensely congested lungs after section or ligature of both paria vasa at the same time. Here the deep, forcible, and very slow and infrequent inspirations, and the congestion of the pulmonic blood vessels, acting as pressure alternating in opposite directions, cause the serum to transude and wash off the epithelium of the air vesicles. The serum is churned into a spumous froth; hæmorrhage follows in a degree which varies from mere reddening of the foam to pulmonary apoplexy. Inflammation and suppuration may afterwards ensue, but no tubercle. As the animal seldom lives long, how can we know this? If a few days be allowed to intervene between the injury of the two nerves, the animal will sometimes live. Birds will generally survive under any circumstances. Killed some months afterwards, we are able to trace in these animals the morbid actions which ensued in the lungs, and we find no trace of tubercle.\*

\* These observations are founded upon experiments made, in 1847, with the assistance of Mr. Russell Hall (of Cambridge) and Mr. Cotton, on forty-eight animals of different kinds.

Neither fatty degeneration alone, nor exuviation of epithelium alone, nor mere exudation alone is enough to constitute tubercle. The exudation must ever be at the first one of tuberculous blood plasma.

But, in point of fact, as regards the lungs, are these three morbid processes ever conjoined in sequence, unless the blood be tuberculous? Does it ever happen that the epithelium of the air vesicles degenerates fattily in considerable quantity, and is shed; and that this is succeeded by exudation into the air vesicles, except in cases of tubercular phthisis? To this question, I am not at present prepared to furnish a positive reply.

*To be continued.*

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## PROGRESS OF MEDICAL SCIENCE.

### CASES ILLUSTRATIVE OF THE TREATMENT OF ASTHENIC DROPSY—By M. Morton Dowler, M. D.

CASE I.—H—— a German, aged forty-five, ten years resident in New Orleans, of bilious temperament, accustomed to liberal use of ardent spirits, within two years suffered repeated attacks of bilious remittent fever. Within nine months a severe attack of bilious colic, followed by acute hepatitis and jaundice. Treatment. Mercurials pressed to severe salivation, without benefit; for four months in a very enfeebled state; declining and wasting away; and one month confined to bed.

Dr. Dowler found him extremely emaciated; thoracic viscera exhibited no marked symptoms of disease; pulse eighty, very feeble; peritoneal cavity seat of dropsical accumulations, which, by pressure upwards, impeded respiration; right lobe of liver rolled under the points of the fingers, revealing a nodule surface and an almost stony hardness; appetite tolerable; kidneys very inactive, and not eliminating more than a wineglassful of urine in twenty-four hours; the urine albuminous; thirst considerable, and a yellow pul-taceous coating on tongue.

Believing mercurials had done disservice to patient, ordered an ioduretted solution of iodide potassium, with a view to its deobstruent and resolvent action on the liver; also the iodide of iron, with a view to an effect on the blood. Prescribed a

variety of diuretics, and several doses of hydragogue cathartics, without any favorable effect.

This course of treatment continued for ten days, without improvement.

Ascites increased until the distension was no longer durable. Twenty-three pints of fluid, yielding a notable quantity of albumen and phosphoric acid, were withdrawn by paracentesis.

Determined, first, to continue to evacuate the cavity of the peritoneum as often as distention was inconvenient; second, to attempt to arouse the dormant renal emunctory, by exciting the heart and arteries by direct stimulation, and thereby perhaps induce a more favorable condition of the liver; and third, to attempt the induction of hæmatisis and nutrition in this bloodless and emaciated subject.

With a view to the second indication, the patient was ordered to take a wineglassful of the best Holland gin three or four times daily; and with a view to the third indication, directed three times a day ten grains of the impalpable powder of metallic iron in combination with ten grains of the pulvis aromaticus; diet of beef steak and broiled chicken, and other animal food; drink, simple water or infusion of juniper berries, with gum arabic.

This treatment continued for nearly three months, taking an occasional aperient of the pill rhei compos; and during which he was tapped five times, and a quantity of fluids drawn off.

At the end of the three months his strength had in a great measure returned; his muscular system rounded out and firm; his kidneys recovered their function; his color good; and though two full years have now elapsed, there has not been the least return of dropsical effusion.

The patient is now keeping a coffee-house and attending to other business; *his liver remaining, to all appearance, in the same diseased, indurated state.*

CASE II.—— æt. 43, 11 eleven years resident; phlegmatic temperament; used ardent spirits freely; two years previously had an attack of "swamp fever;" since which he had never been well; abdomen distended with ascites; and the whole body affected with anasarcaous infiltration, especially the scrotal cellular membrane; urine scanty and albuminous; no organic disease could be detected.

The conclusion was arrived at that the disease was the result of a lesion of the blood impairing its vitality. Ordered fifteen grains of powder of metallic iron three times daily,

with pulv. arom.—also a wineglassful of gin three times daily, with nourishing animal diet, and an occasional aperient of pill rhei compos.

This treatment continued five weeks, during which he was tapped twice, and five and a half gallons of fibrinous fluid discharged—and at the end of which the whole dropsical condition had ceased to exist. The patient is now a day laborer, apparently completely cured.

*Though we often attain complete success in acute and sthenic dropsy, by means of diuretic and hydragogue cathartic medicines, it is very rarely in cases such as the above, that they are advantageous or even admissible. Diuresis and hydrocatharsis often aggravate the disease.*

“The sequelæ of malarial fevers are very often anæmiasis or a tendency to or actual dropsy, especially to anasarca and ascites.” The pulvis ferri alone or with quinine and direct stimulation will in these cases often remove the disease.

I have lately treated several cases of children affected with scarlatinic anasarca, with its peculiar indurated infiltrations, and with complete success, by administering for a few days a solution of the hydrochlorate of ammonia (sal ammoniac) alternated with pulv. ferri metall. I am persuaded the former is one of the best resolvents and deobstruents we possess in such cases. Its effects are a moisture of the skin, notable increase of urine, soluble state of the bowels, softening and resolution of the subcutaneous hardness and swelling, and subsidence of the dyspnoea and disturbance of the heart and tumidity of the belly.—*N. O. Med. & Surg. Journal.*

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#### NEUTRALIZATION OF THE SYPHILITIC VIRUS, BY THE PERCHLORIDE OF IRON.

In a report made to the administration of hospitals at Lyons, Dr. Rodet has communicated the composition of a liquid which possesses the property of decomposing the syphilitic virus, and thus preventing contagion. After numerous experiments made for the purpose of discovering some substance which would, without cauterization, prevent contagion, this physician has fixed upon the perchloride of iron, and has deduced the following conclusions from his varied investigations.

1. The most suitable dose of perchloride of iron and citric acid, is four grammes of each to 32 grammes of distilled water. By adding to this solution one gramme of hydrochloric acid, preservation from contagion may generally be

secured. With two grammes of hydrochloric acid, preservation is more secure, and with four grammes still more so. The prescription would therefore be as follows:  $\mathcal{R}$  Distilled water, thirty-two grammes, perchloride of iron, citric acid, hydrochloric acid, aa four grammes.

A liquid endowed with properties almost identical, may be found by leaving out the citric acid, and increasing the quantity of hydrochloric acid one-third, according to the following prescription:  $\mathcal{R}$  Distilled water, thirty-two grammes; perchloride of iron, four grammes; hydrochloric acid, six grammes.

This latter preparation is, however, slightly more irritating than the former, and therefore not as desirable.

2. The most simple manner of employing this liquid is by dropping a drop on the part inoculated by the virus, and allowing it to remain there ten or fifteen minutes, or by placing upon the part a small piece of lint or charpie previously dipped in the preparation. If the liquid remains in contact too short a time, the prevention of contagion is incomplete, and an ulcer makes its appearance which develops itself slowly, and which may be regarded as an imperfect chancre.

The prevention of contagion will be complete if the lint or charpie is applied for an hour. Even a shorter time will probably suffice, but no inconvenience will be experienced if it is allowed to remain twenty-four hours.

3. This liquid modifies the simple chancre with a rapidity truly remarkable, destroying sometimes in twenty-four hours their property of secreting virulent pus.

4. It seems to be susceptible of many other applications. Vaccine matter is neutralized by this liquid in the most complete manner. This considered by itself is a matter of small importance, but it induces the hope that we may be able to modify the varioloid irruption and prevent the disfiguring marks which it sometimes leaves behind it, by bathing with this liquid at an opportune time the parts of the skin which we wish to preserve.

Lastly. Is not this liquid capable of neutralizing the virus of hydrophobia as well as that of syphilis and vaccine? If experience enables us to answer this question affirmatively, science will have made an important conquest. As this remedy does not cauterize the tissues, even suspected bites may be bathed with it without fear, while cauterization not only is rejected by a large number of victims on account of the dread which it inspires, but even when employed, does not always reach every part of the bite, and is not always successful in destroying the virus.—*Journ. de Medicine et de Chirurgie Char. Med. Journ.*

**OXALICO-FERRUGINOUS LEMONADE (LIMONADE OXALICO-MARTIALE) IN INTERMITTING FEVERS**—Translated from the *Gaz. Hebdom. de Med.* of May 18, 1855, by Mrs. M. E. V.

Ferruginous preparations have often been used in intermitting fever, not so much on any specific claim to combat the lesion of the organs, but for the cure of the different cachexies by which this disease is complicated.

Some practitioners, however, attribute a directly antiperiodic influence to iron. Joseph Franck has found it very successful, Marc prescribes the martial sulphate, Wheaton the phosphate, Zollikofer the hydrocyanate; Benherald even prefers the subcarbonate of iron to Peruvian bark.

These are the authorities which induced M. Gamberini to undertake his experiments. He chose the sulphate of iron, which he administered in different methods and quantities. He has seldom been completely unsuccessful, and in such cases, M. Gamberini attributes more to the irritability of the viscera than to any want of power in the medicine. According to him, if this salt does not deserve to be placed above quinquina, it renders at least the radical cure more certain when the fever is kept up by engorgement of the spleen.

For the rest, M. Gamberini, believing that the febrile principle exercises a special influence on the spinal marrow, has thought proper to join to the ferruginous remedy an adjuvant which might moderate the nervous susceptibility. This sedative, which has been used by Coindet and Christison, is oxalic acid. The formula for this lemonade is thus composed: sulphate of iron, sixty centigrammes, (℥ ss;) oxalic acid, thirty centigrammes, (gr. v); distilled water, fifteen hundred grammes, (℔ iij;) white sugar, forty-five grammes, (3 ix.)

This preparation, administered during the apyrexia, should be given several days after. Care must be taken to shake the bottle containing the medicine, so as to suspend the proportion. Although it possesses a strong martial taste, the sick soon get used to M. Gamberini's composition (*apozeme*.) As to curative results, our Italian confrere has used it in tertian, quotidian, quartan, simple and complicated fevers. A single dose often suffices to break the fever, or to ameliorate the access considerably. In some other cases the preparation had to be administered two or three times.—*Bolletino de Scienze Med. di Bologna*.—*N. Orleans Med. & Surg. Journal*.

ABSTRACT OF THE REPORT OF THE COMMITTEE OF THE  
ACADEMY OF MEDICINE ON CATHETERIZATION OF THE  
AIR PASSAGES.

The committee met on five different occasions. At these different meetings thirty-eight patients, in the aggregate, were submitted by Dr. Green and others to the test of the operation of passing instruments into the air passages, and three, of the injection of nitrate of silver into these passages.

*I. As to the practicability of the operation of passing instruments into the air passages.*

This division of the report was considered under the following heads :

1. *History of catheterism of the air passages.*—The introduction of tubes into the air passage is not a recent operation. It was recommended by Hippocrates, and seems to have been long practiced in preference to bronchotomy. Desault, among modern writers, also recommended it strongly. Mr. Ryland, in his treatise on *Diseases of the Larynx*, devotes a short section to this operation. Other authors allude to it as a matter of history.

2. *Results of experiments.*—The results of experiments confirm the record of history, as to the practicability of the operation of catheterizing the air passages. In eleven cases it was performed to their entire satisfaction. The evidences on which they rely as proofs of its success are :

1. *The detection of the tube in the cavity of the larynx by the finger passed into the mouth.*—This was done by several of the committee, and was demonstrative of the position of the tube in relation to the laryngeal openings.

2. *The symptoms manifested by the patient.*—The symptoms which distinguish the passage of an instrument into the trachea and œsophagus, may be thus contrasted—See following page.

TRACHEA.

1. Suffusion of the face, rapidly increasing to turgescence and lividity.
2. Great anxiety and alarm; not easily pacified.
3. Eyes wild, staring, overflowing with tears.
4. Cough violent and spasmodic.
5. Respiration greatly disturbed; inspiration loud, hoarse and croupy; expiration attended with violent cough, ejection of bronchial mucus through the tube, and finally full breathing, throughout the instrument.
6. Voice extinguished, a hoarse whisper, interpreted with difficulty.
7. Retching slight.

ÆSOPHAGUS.

1. Suffusion of the face slight, rapidly subsiding with cessation of retching and vomiting.
2. Little anxiety; easily pacified.
3. Eyes natural; slight suffusion from tears.
4. Little or no cough.
5. Respiration little, if at all disturbed; occasional puffs of air through the tube.
6. Voice distinct; often quite natural.
7. Retching and vomiting a common symptom.

So prominent and characteristic are the symptoms which the patient manifests on the successful introduction of the instrument into the air passages, and so strikingly do they contrast with those witnessed when it enters the æsophagus, that the committee came to regard the rational signs as the surest criterion of the success of the operation. In but a single instance did they fail of being exhibited with characteristic intensity. In this case the patient had suffered from a syphilitic ulceration of the air passages, and to this circumstance, together with his enfeebled condition, was attributed the absence of the severe symptoms. Dyspnoea and lividity of the face were the only evidences of the success of the operation. They therefore establish it as a rule, to which ordinarily there is no exception, that the rational signs above tabulated will differentially distinguish the course which the instrument takes, whether into the laryngeal or æsophageal passages.

Other tests were employed, but none of them were found, on trial, free from objection.

The power of the patient to blow out a lighted candle, and to collapse and inflate, at will in respiration, a bladder attached to its free extremity through the tube, has been much relied upon as a proof that the tube had entered the trachea. But it was found that when the tube was purposely passed into the æsophagus, this power was still retained, though in a much less degree.

The passage of two sponge armed probangs into the throat, and by the withdrawal of the lower one, calculating the position of the other, whether in the æsophagus or trachea, did not, as far as experimented with, yield satisfactory results. For it was not proved to the satisfaction of the committee that the sponge probang entered the larynx and trachea.

The sensations of the patient are reliable only when the tube has been repeatedly passed both into the trachea and æsophagus. In these cases patients have very promptly and correctly decided which passage the instrument was entering.

This fact was strikingly illustrated in Mary Norton, on whom the operation was repeatedly performed before she was brought before the committee. On the first and second trials of the introduction of the tube by Dr. Green, she shook her head, indicating that it had not entered the larynx. The operator, however, was satisfied on the last trial that the tube had penetrated the trachea, and that the sensations of the patient were not to be relied on, when she ejected a portion of the contents of the stomach through the tube, and thus demonstrated not only the position of the instrument, but equally the correctness of her sensation.

It appeared very evident also, in the course of these experiments, that the opinion of the operator, as to the course which the instrument takes, is unreliable, when he trusts to his own senses, and disregards symptoms. They witnessed in two cases the fallacy of Dr. Green's opinion, as to the success of his experiment, though based upon so large an experience. In both instances, while positive that he had successfully passed the instrument into the trachea, the patient vomited through the tube, and thus demonstrated his error.

## *II. Facility of the operation.*

While these experiments proved conclusively to the minds of the committee the practicability of passing tubes into the air passages, they also afforded opportunities of witnessing the facility with which the operation is performed under different circumstances, and with different instruments. These were as follows :

1. *Previous preparation of the patient.*—It is contended that the facility with which the instrument is introduced depends much upon the previous preparation of the patient, by frequent application of the nitrate of silver to the upper part of the larynx. To obviate this objection, the committee met twice at Dr. Green's office to witness the experiment upon patients whom he was treating with local applications to these parts, and at the second visit at Bellevue hospital, the patients were selected from a class which had been expressly prepared for the experiment, by the application of caustic to the throat from three to five times during the preceding week.

The results of these experiments, however, do not sustain the above assertion. The patients on whom Dr. Green had been operating for six months, more or less, were as intolerant of the actual passage of the tube into the trachea as those first submitted to trial. The case of Mary Norton was adduced. Although the tube in this case had been passed into the trachea half a dozen times previously to her coming be-

fore the committee, still she exhibited in the most marked manner all the evidences characteristic of the introduction of a foreign body into the air passages, when the tube was successfully passed.

2. *Instruments employed.*—The facility with which catheterism of the air passages is performed seems to depend in a great degree upon the instruments used. Those employed in these experiments were: 1. A tube, consisting of Hutching's catheter, No. 10, with a wire stilet, and bent with a curvature corresponding to a circle of six inches in diameter. 2. A tube of the same size, slightly bent at its extremity. This was the instrument selected by Dr. Green, and is the one which he is accustomed to use in practice. 3. A sponge armed probang, the sponge having a diameter of one-half to three-quarters of an inch. The result of the experiments with these several instruments was as follows:

	No. of Trials.	Failed.	Succeeded.	Per ct. Failures.
Tube with large curve, - - - -	19	8	11	about 28
Tube with small curve, - - - -	37	34	3	" 92
Sponge probang, - - - -	18	18	0	100

From these experiments it appears that the instrument best adapted to succeed in catheterism of the air passages, is a tube having a large curve, or one shaped like a common catheter; while that least adapted to enter the trachea is the sponge armed probang.

1. *The tube with a large curve.*—This instrument was introduced into the trachea eleven times to the entire satisfaction of the committee. The fact that the operators were successful eleven times in nineteen trials proves that this tube can be introduced with considerable certainty into the air passage.

2. *The tube with the small curve.*—This is the instrument selected by Dr. Green for catheterization of the air passages, and is that which he uses in practice. In these experiments he was the only one who employed it, and the result shows that even in the hands of the most skillful practitioner, it failed of entering the air passages in about 92 per cent. of trials.

3. *The sponge probang.*—This instrument afforded the least satisfactory results of any used. Notwithstanding the most

persevering efforts with the whalebone slightly bent, as used by Dr. Green, and with patients who quietly submitted to the test of experiment, the results were entirely negative. In no instance did it satisfactorily enter the trachea. In two instances, with the whalebone curved like a common catheter, the sponge was thought to have entered the larynx; but with repeated efforts it could not be passed between and beyond the vocal chords. The suffocation was so great each time as to compel a withdrawal of the instrument.

### *III. The utility of injections into tubercular cavities of the lungs.*

This portion of the report was brief. As the committee had no evidence that injections could be thrown into tubercular cavities of the lungs, they refused to discuss, on merely theoretical grounds, the question of their utility. One of the three cases injected with nitrate of silver died within twenty-four hours after the operation, not having recovered from its immediate effects. A letter was read from the physician who made the autopsy, describing the condition of the air passages. The mucous membrane had the appearance of a recent application of the caustic.

#### *Conclusions.*

1. Catheterism of the air passages dates its history from the time of Hippocrates.

2. The best evidences of the successful passage of an instrument into the air passages, are the rational signs.

3. The facility of the operation depends upon the kind of instrument used—the tube having a large curve being best, and the sponge probang least adapted to enter the trachea.

4. That there is no reliable evidence, in the opinion of the committee, that the sponge probang has been passed through and beyond the vocal chords.

5. That there is no sure evidence that an instrument can be passed *at will* into the right or left bronchial divisions.

6. That in the great majority of instances where injections are supposed to have been thrown into the lungs through a tube, they have passed directly into the stomach.

7. That as regards the utility of injections of nitrate of silver into the lungs, the fact thus far developed in the experiment of the committee, lead them to regard the operation as one fraught with danger as well as difficulty.

This report was signed by Prof. Parker, chairman, Drs. Wood, Metcalfe and Stone. Dr. Anderson subscribed to all but that bearing upon the utility of injections. This he did

not think sufficiently investigated. Dr. Stevens, who witnessed but a few experiments, made a short report. Prof. Barker made a lengthy minority report.

IN regard to the foregoing report, we cannot forbear remarking that the conclusions arrived at by the committee do not appear to us to be entirely satisfactory. We shall not venture an opinion as to whether or not the anatomical or physiological obstacles to the introduction of a sponge armed probang within the trachea, are insuperable. We have very frequently attempted it, and it is true that our efforts have been failures. As soon as our probang has passed within the rima glottis, it has uniformly been arrested by some cause or other, and our patients seemed impressed with the belief that it passed much lower than it actually did. But we reasoned in this manner about it: Whilst the probang was held in duress by the laryngeal muscles, the sponge has been deprived of its caustic solutions by their constriction, which went trickling down into the trachea, thus giving rise to deceptive sensations.

The passage of an elastic tube low down into the air passages seems to have been satisfactorily demonstrated to the committee. This we regard as a great achievement. Now, that injections of solutions of lunar caustic can in any manner prevent the deposition of tubercular matter, we presume that Dr. Green, nor anybody else believes. But when this matter has been discharged, leaving a suppurating cavity, we are by no means convinced that such topical medication may not assist in its obliteration and cure.

We confess that we have been somewhat surprised at the tone of severe criticism to which Dr. Green and his method of treating the diseases of the air passages have been subjected. We are apprised of no unprofessional propriety on his part. Possibly he may press his hobby to what may appear to some to be an unwarrantable extent. But this is a venial fault. If we are permitted to judge from our own limited experience, we should say that he has made one of the most important contributions to practical medicine which marks the present era.—EDS. STETH.

The New Orleans Medical and Surgical Journal contains a communication on cholera, from Dr. Lyne of La. This writer considers the spinal marrow as the seat of the disease, and cures it by cupping and counter irritants over the dorsal vertebra. Mercurial alteratives and opiates are subsequently resorted to, to restore the secretions. Dr. Lyne's success seems to have been very remarkable, as the following would indicate. Being called to a cholera patient, he says :

"I examined minutely all his symptoms ; listened patiently to his own account of his sensations ; pressed all over the chest, abdomen, and in the pelvic regions. He complained only of the abdomen. When I attempted to examine the *spine* he assured me there was nothing the matter there ; his disease and suffering were all in the abdomen. In my examinations of the spine, he began to complain soon after I reached the dorsal ; he complained that I was pressing much harder than I had done before. There was a point at which he complained mostly, and as I receded from that point up or down he complained less ; the tenderness on pressure was confined to four or five of the processes of the spine. I asked him where I hurt him by the pressure ; he answered that the pressing hurt him at the point of pressure, but my pressure caused a greater increase of the pain in the abdomen than it did in the spine. Also, that the hurting in the spine and the increased hurting in the abdomen ceased as soon as I stopped pressing. I immediately acted upon this hint ; scarified and applied my cups on nearly the entire course of the spine, with two or three additional cups on each side of the tender point. After drawing some ten or twelve ounces of blood, or rather when I found no more could be drawn, I removed the cups and applied a mustard plaster on the whole course of the spine. He had been purging every fifteen or twenty minutes and vomiting occasionally before the cupping. After the cupping there was neither purging nor puking. I had ears of boiled corn placed around him under his blankets, and constantly replaced as they became cool. In half an hour the extremities became warm. From the steaming of the corn and the previous perspiration, the surface was as wet as though he had come out of a bath. I then had him rubbed with dry mustard, and gave him two pills of cal. 2 grs. sac. sat. 2 grs. opium 1 gr.—to be repeated if necessary. *It was not necessary.* There was no return of any of the symptoms.

The next morning I met another case, in which, although the feet and legs to the knees, the hands and arms to the elbows, were cold, still the cold sweating and shriveling of the skin had not yet commenced. This case was cupped freely on the spine. Having no pills and being in a hurry, I gave about six grs. calomel and one of opium; directed the feet to the fire, with more blankets. In the evening, seven or eight hours after, I again saw this case; no symptoms of cholera, but complained of being badly salivated, which continued for the next week or ten days.

Since that time I have had about one hundred cases of cholera. I have never seen but one (a little girl, seven or eight years old,) in whom I did not find the tenderness to exist. I not only have not lost a single patient with cholera since I adopted this mode of treatment, but I have *never failed to give entire relief from all symptoms* of the disease in the space of an HOUR."

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# THE STETHOSCOPE.

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VOL. V.

RICHMOND, VA. OCTOBER 1855.

NO. X.

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## ORIGINAL ARTICLES.

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ALTHOUGH not designed for publication, we take the liberty of placing before our readers the following practical letter on a subject which at present engages the medical mind of the state more closely than at any former period.

Dr. Farrar emigrated from Amelia county in this state, more than twenty years ago. His friends have been often gratified to hear of his eminent professional career in the state of his adoption, and will be none the less pleased, because his communication lacks the formality of a didactic essay. We also give prominent position to extracts from Dr. Harrison's excellent paper.—[EDS. STETH.

### **Letter on the Treatment of Yellow Fever.**

BY S. C. FARRAR, M. D. JACKSON, MI.

I send you a paper on yellow fever, which was published in the New Orleans Medical and Surgical Journal in 1845. It is the best and most graphic account of the disease I have met with, and is from the pen of Dr. Harrison, formerly a professor in the New Orleans medical school. You can republish it, as a compliment to his memory.

I will also give you a few facts in reference to yellow fever, and my method of treating it.

This letter is not for publication, but for your own use.

We have had two visitations of yellow fever: the one in the summer and fall of 1853—the other in 1854.

When it first occurred here, it was a new disease to us. None of our medical men were acquainted with its treatment. We had no good nurses—and hence the disease was very fatal—but not more so than in Vicksburg and New Orleans. Last year, the cases were not so numerous. Our citizens were less alarmed. We had a number of good nurses, and met with better success. I need not dwell upon the symptoms of this disease. After sending you Dr. Harrison's paper, this would be an act of supererogation.

Many of our patients were stricken down in the night, after eating a hearty supper, and retiring to bed, apparently well. They would arouse the inmates of the house, complaining of chilliness or a distinct rigor; to which, after a period of longer or shorter duration, a fever would succeed, attended with pain in the back, head and limbs. In some violent cases, this pain would extend down the arms, to the ends of the fingers, and along the legs and feet, to the ends of the toes. With flushed face, the skin becomes hot, thirst excessive, great restlessness, and occasionally the stomach is very irritable.

When called to see a patient thus affected, if in the chill, I had him placed under a sufficient amount of cover to render him as comfortable as his condition would permit, and had the feet and legs immediately immersed in a hot mustard bath, under the cover, and gave him from time to time a little warm orange leaf, sage or balm tea, until the chill subsided and reaction was induced and the fever supervened. I then gave a dose of blue mass, fifteen to twenty grains, to evacuate the bowels. If there was no irritability of the stomach, I occasionally gave two tablespoonsful castor oil to an adult, and then kept up a gentle perspiration until the fever subsided or remitted; which in the cases here usually occurred about seventy-two hours from the time of its invasion—sometimes in forty-eight hours—and sometimes it ran on over ninety

hours—but seventy-two were the usual number of hours. During the fever I gave from time to time the acetate of ammonia, a desertspoonful every three hours, to encourage perspiration. If the stomach was irritable, I added a little morphine; and if this disagreed, I substituted the following:  $\mathcal{R}$  Bi. carb. soda, 3 i; mint or orange flower water,  $\frac{3}{4}$  iii. Dose, a tablespoonful every two or three hours, according to circumstances. This was sometimes aided by a mustard plaster over the stomach, mustard plasters to the abdomen, or poultices containing some mustard were often applied to the abdomen—affording the patient great relief when he was restless and the abdomen tender and tumid. To abate the heat about the bed, I folded up a towel lengthwise, immersed it from time to time in cold water, and applied it over the forehead, brought it down the cheeks, and let the ends extend down over the carotid arteries. This afforded the patient great relief. I never gave my patients but one active cathartic, and that was in the commencement of the fever. If after that the bowels required to be moved, I resorted to an enema of salt water, salts and tepid water, or tepid water and molasses. When it was grateful to my patients, I allowed them ice water or pellets of ice; but usually, I found the tepid orange leaf tea to agree best with them. To allay the violent nervous pains, I sometimes gave morphine—more frequently aconite—and last year, in several cases, where the stomach was irritable and the pain in the head and back very severe, I found a quarter to a half grain extract cannabis indica, given at intervals of three to four hours, to have a good effect. Try this, if you should be visited by the disease. Sometimes Dr. Rush's old remedy (lime water and milk) would allay the irritability of the stomach.

Now, remember this is a fever that will run on from twenty-four to ninety-six hours, and don't be too anxious to physic your patient. Open his bowels at the commencement; keep the cover on him; exclude the light of the windows and all officious visitors; give him good nurses; let him have warm or tepid drinks from time to time; keep up the perspiration

until the fever remits or intermits ; use frequently, under the cover, when the perspiration diminishes or is disposed to cease, the hot mustard bath ; let the room be well ventilated, but exclude currents of air from his bed ; and during the fever, if he has stranguary, use an enema of tepid water, and apply hot cloths over the pubis. These will often afford great relief. If your patient is very restless and cannot sleep, sponge (under the cover) his body, legs and arms with hot spirits and water. This will refresh him, and often give quiet sleep.

I believe with Dr. Harrison, that the blood is poisoned in yellow fever ; and I believe also that the great outlets for the disease are the skin and kidneys.

Well, you have carried your patient through the fever, by the above treatment ; but now he is in a most dangerous condition. He may, it is true, go on to convalesce rapidly, or he may in a few hours have black vomit. Watch him closely. Don't be deceived by his answers to your questions, or by the calmness of the pulse, and the other indications of amendment. My practice, when the remission occurs, is to have sixteen grains quinine made into eight pills, and I direct two every four hours until the patient is quininized. I then discontinue it, and give, as circumstances may demand, a little of the infusion of bark, or eupatorium, or porter, or ale, or brandy. Some stomachs will not bear quinine. Then you will give infusion of bark, Huxham's tincture, ale, porter or brandy. We cured last year one case after the patient had black vomit. We applied a blister over the stomach, and dressed it with morphine and quinine, and gave from time to time creosote in sweetened water. Hæmorrhages from the nose or bowels, in the early stage of the disease, are often critical. At an advanced stage, I have used the turpentine emulsion with benefit.

Now, my dear sir, I do not intend to say that my practice will be the best for the disease, as it appears in Virginia, but I do say that this practice has been eminently successful with me. One physician is wedded to quinine, one to mercury,

another to spirits of turpentine, another to muriated tincture of iron, but there is no specific in yellow fever.

I have said nothing about the lancet. Our cases would not bear it. Wet or dry cups—more frequently the latter—were used with advantage. When pain of the head and back are acute, a half dozen dry cups on the back will often afford great relief—or cups applied to the mastoids will relieve the eyes, forehead and temples of pain. Let your patient take no nourishment, from the time of attack until the fever remits, but the tea or a little gum water, or a very small portion of rice water; and if he is much prostrated, after the fever subsides, don't have his clothes changed until he acquires more strength, but have his skin frequently sponged with hot or warm spirits and water.

On the fifth day, at the urgent solicitation of a patient, I permitted his clothes to be changed, and in a few hours thereafter I was called to see him, and found him with a small, compressible pulse, great prostration, and considerable nausea—and for twenty-four hours I had to persevere with diffusible stimuli to save him.

In this disease, as in typhoid fever, we must economize our patient's strength, and remember that although he may have hot skin, throbbing carotids, and a pulse of considerable strength at the outset of the disease, yet, in a few hours or days, these are exchanged for a reversed condition, when probably it will require all the resources of the profession to keep the heart in action, and to sustain the vital powers. I sincerely hope you may escape the dreadful scourge; but should it come upon you, you will derive some advantage from Dr. Harrison's paper; and if my hasty sketch of the practice I pursued should not benefit you, give it the destination of useless paper—throw it under the table.

My friend, Dr. Fenner of New Orleans, has gone on to Norfolk to assist the physicians there in the treatment of the disease. He is a gentleman, a ready writer, and an experienced and skillful practitioner. I commend him to your attention, kindness and confidence. Please write to some of your medical friends in Norfolk, and speak of him on my authority.

## Remarks on Yellow Fever.

BY JOHN HARRISON, M. D.

Professor of Physiology and Pathology in the Medical College of La.

[Republished.]

I purpose in the following pages to state the symptoms of yellow fever, and, as far as practicable, the lesions found after death; to sift, as far as possible, its pathology, and to discuss the best methods of treating it. In so doing, I shall confine myself to my own convictions and experience without reference to the writings and opinions of others. What I write is the result of observations made during thirteen years' practice in the city of New Orleans; during ten of which I was connected with the Charity hospital, either as house surgeon or visiting physician. In that noble retreat for the unfortunate, and in private practice, I have treated many cases of the disease, and have made or assisted at several hundred *post mortem* examinations. In addition, I have experienced the disease in my own person. I make these remarks for the purpose of showing what opportunities I have enjoyed of studying the disease; and if, in the present paper, there be found little that is new or of much value in a positive sense, it still may, I hope, be of some service in destroying erroneous notions of the disease, contracted by those who have never seen it.

### SYMPTOMS.

Omitting individual peculiarities, let us sum up those symptoms by which the disease is recognized. We will suppose a person who has been protected, in the best way possible, from those obvious causes of disease which may affect the health at any season. He is well lodged and clothed; he is temperate in his diet, and is careful not to expose himself to the sun, to wet weather, or the night air; he is abstemious with regard to alcoholic liquors. These precautions, however, avail him little. In the midst of excellent health, he is

stricken down. He experiences a rigor, which sometimes ends in a violent ague; in a few hours a burning fever comes on, with distressing pains in the head, back and limbs. The tongue, however, is as yet moist, and the urinary secretion copious; but the eyes are generally dull and heavy, and intolerant of light.

In the course of twenty-four or thirty-six hours, the usual consequences of violent fevers ensue; the secretions are diminished in quantity, and altered; the tongue becomes red around the edges, pointed and furred, with a white or yellowish down in the middle; sometimes, though rarely, it is dry. Sordes appear upon the teeth. The urine is highly colored, and in many cases highly corrosive. The skin is usually moist, with sudamina scattered here and there—principally over the breast. It is, however, sometimes dry, and very hot. The pulse continues strong and quick, beating at the rate of 103 to 120, or over, per minute.

Towards the close of the third day, or beginning of the fourth, the fever intermits. The prostration of muscular power, which has been increasing from the first moment, is now complete—the patient being scarcely able to turn in his bed. The pulse falls in frequency even below the natural standard, though in general retaining its usual fullness. The stomach now becomes more or less irritable, being unable, in most cases, to bear even a spoonful of cold water. The skin and eyes assume a yellow tinge, and both are highly injected. This injection, however, does not appear to be attended with high action, for the skin is now rather cold to the touch and the secretions from it seem altogether to have ceased. If we press with a finger upon the surface of the body, we observe, upon removing it, a white spot, which slowly and gradually resumes its former color. This is strikingly in contrast to the quick flash wherewith the blood returns into the tissues on the first or second day. This injection in truth is of a passive character, and is undoubtedly one of the consequences of the foregoing violent actions to which the whole system has been subjected, and by which the organization of the tissues have

suffered. In short, the parts are changed in structure—have lost in consequence their natural elasticity—make little resistance to the blood coming from the heart—and are injected as we might inject a sponge with a syringe.

From the condition last described, the patient gradually returns to health or dies. If death is to be the result, we shall see the irritability of the stomach growing almost hourly greater—even a teaspoonful of cold water being thrown up the moment after being swallowed. An indescribable *malaise* afflicts the sufferer, although he appears at the same time to be without any fixed or local pain. A continual sighing, involuntary groans, extraordinary restlessness, great diminution or a total stoppage of all the secretions, announce the approach of the fatal symptom—black vomit. On the fourth, fifth or sixth day, this is thrown up, and death soon closes the scene.

The matter first thrown up consists almost entirely of the drinks taken. A few flocculi of mucus may be discerned floating here and there in the liquid. Towards the approach of black vomit these flocculi increase in quantity, and are of a deep gray color. Mixed with them we may often find, upon a close examination, a few striæ of a darker matter—in other words, of black vomit.

This last mentioned fluid is not thrown up in the manner that emesis usually occurs. The muscular motions, and the sounds accompanying the ejection, are peculiar. There is no violent retching; a sound is heard, caused apparently by a hiccough mingled with a cough, and the black matter is ejected. In many cases this is done so violently as to send it many yards. I have seen it, in the hospital, thrown entirely over the bed of the next patient and fall on that adjoining.

The conditions of the patients when throwing up black vomit, vary most remarkably. Some are quiet—answer questions—and appear rational, but indifferent to their fate; so much so, that they will frequently respond to questions concerning their condition, by saying “they have the black vomit.” Some will even get out of bed and walk about—

declare they are perfectly well, and wish to dress themselves. I have seen this occur, and death take place in half an hour afterwards. Others are delirious, and force is required to keep them in bed; others lie in a semicomatose state, and keep up a constant and most distressing moaning.

Such is the usual course of the disease; but there are a vast number of individual differences which we ought to expect, since it would be difficult to find any two persons in precisely the same condition at the moment of attack; and, therefore, it is but in the application of the well known law "that the same cause acting on different subjects must produce different effects," that we should be led to expect individual differences in all epidemic diseases. Let us take notice of some of the most remarkable.

A. The symptoms of yellow fever will vary according to all those general circumstances which modify those of other diseases. Thus, we may have the congestive, inflammatory, or typhoid form, according to circumstances. In many cases we have gastric irritability from the very commencement, together with pain or pressure at the epigastrium. Towards the close, we have, in many cases, passive hæmorrhages from the application of cups, from leech bites, from wounds given by the lancet in bleeding, &c. They also occur from the gums and tongue, from the nostrils, from the bowels, from the scrotum, from the eyes, (though rarely,) and sometimes from the ears. These hæmorrhages, though dangerous, are not however indicative of a desperate case, since I have known many of them recover. In one case under my charge, the patient bled for three days from the gums and tongue, losing about a pint a day, when it was arrested by the use of kreosote, and she recovered. The blood lost coagulated to some extent, but very imperfectly.

B. In some few cases there is no actual chill at the commencement of the disease; and indeed, no fever ever makes its appearance. These cases are characterized by extreme restlessness from the beginning, and by an indomitable disposition to walk about; hence, they are sometimes called

"walking cases." They present, as is well known, by far the most formidable variety to the physician, and indeed are generally regarded as incurable. The patient in this form of the disease, presents a natural eye, tongue and pulse. The skin is also natural, except that towards the extremities it becomes cold, and very often the hands and feet look as if they had been subjected to the long action of water. When the patient is questioned, he seems loath to answer—returns sullen replies, and tells the physician there is nothing the matter with him. There is no gastric irritability, and no pain or pressure at the epigastrium. The stools are fluid, and the urine copious and limpid. In all this absence of the usual symptoms which mark the disease, there is, however, a very peculiar and characteristic expression of the countenance, which cannot be described, but when once seen is never forgotten.

The condition above described continues until the end of the second or beginning of the third day, when a change occurs. The patient lies down from inability any longer to keep up; the pulse sinks in volume, but increases wonderfully in frequency; the skin grows hot; the stomach swells up, protruding the walls of the abdomen before it; black vomit in large quantities is thrown up at the first gush, and death follows very shortly afterwards. This variety is exceedingly rare.

C. In other cases, we have all that tribe of symptoms which characterize ataxic fevers; such as great irregularity in the capillary circulation; certain parts becoming suddenly cold and pallid, and the next moment red and hot; copious perspiration, alternate with hot and dry skin; the bowels are now loose, and a few hours afterwards the patient may be suffering from the torments of constipation; the respiration is hurried after the slightest exertion; the urine, in the morning, limpid, and in the evening perhaps highly colored; the tongue may be this moment moist, and in a short time, without appreciable cause, perfectly dry; chills and rigors supervene from the slightest application of cold; tremors, nervous deli-

rium, &c. also occur in this form of the disease. It is generally fatal.

D. Towards the close of the attack, the brain frequently becomes affected. The physician may have flattered himself that his patient is perfectly safe; the fever has subsided for twenty-four hours or more; the tongue and pulse are good: there is no gastric irritability of any consequence; urine has recently been passed; all things, in short, tend to convince him that the case will end in a speedy cure. After a while, some slight remark from the patient arrests his attention; the nurse informs him that she thinks the patient has been "wandering in his mind;" upon further questioning and trial, however, he can discover nothing more. There is, however, an unquiet glance of the eye, which still further excites his suspicions. He pays a visit earlier than usual and enters the sick chamber with a foreboding heart. He finds his worst fears realized—nervous delirium has set in, and he abandons all hope.

In several cases I have seen the brain seriously affected in the first few hours after the attack. In some, convulsions occurred, ending in coma, from which last they never recovered. These cases, however, were in children.

In other cases, though there were no convulsions or coma, the brain was attacked in the beginning, and continued affected throughout the disease. These cases are not characterized by *delirium*, properly speaking. The little tricks—the perverse pleasure of thwarting their physician and nurses—the great delight shown upon the success of their schemes, characterize the mental perversion of the insane, rather than of the delirious. These cases, though not altogether hopeless, are exceedingly dangerous.

Delirium often comes on during the first or second day. It is generally relieved by depletive means, and is not considered a very dangerous symptom.

I may here relate a case which occurred in my practice in 1837, and which presents some singular features. The patient, a robust young man, about twenty-five years of age,

had gone through a severe attack of fever, and on the 6th day was pronounced safe. Thinking himself so, he desired his nurse to bring him a mint julep from the bar of the hotel in which he lay. On her refusing, he insisted that the physician had ordered it. It was brought and drunk. The next day I found him perfectly insane, but without fever or any physical symptom of disease. His insanity manifested itself by loud talking—wild, but somewhat coherent fancies, hysterical laughter and tears; paroxysms of rage, succeeded by whining complaints of ill treatment; insomnolency, and odd remarks, that provoked to laughter the most saturnine of his attendants. Under the use of opiates and the shower bath, he recovered, and is still living in good health; but it was more than two months before he was completely relieved.

Another affection of the encephalic organs is manifested by an unusual disposition to sleep. It appears soon after the patient is taken down. There does not appear to be so much suffering as in ordinary cases; the pains in the head, back and limbs are by no means so violent. The pulse is frequent and quick, but small and weak. The skin is usually pale, or rather sallow. But the most formidable symptom is the tendency to sleep. It at once alarms the nurse and attendants; and it may well do so. The patient may be easily roused, will answer questions put to him, but while talking, falls away into slumber. These sleeping cases, as they are called, are justly considered as being among the most desperate the physician can meet with.

There is another phenomenon which is of very general occurrence when the case is about to terminate fatally. I allude to an exquisite tenderness of the epigastric region, supervening between the 4th and 6th days. The slightest attempt to press upon the parts is resisted by the patient with all the expressions of intense agony and horror. What is the cause of this extraordinary sensitiveness? Is it inflammation? Assuredly post mortem examinations flatly contradict such a supposition. It is known to exist most intensely in cases where, after death, we find but very trivial lesions. Besides,

it is not experienced in other diseases, in which, after death, we find much greater lesions of the stomach and duodenum. Nor does this phenomenon resemble that produced by pressure at the epigastrium in cases of simple gastro-enteritis. It rather resembles the effects produced by pressure, in cases of violent peritonitis. But peritonitis does not exist. I have never met with decided peritoneal inflammation in all the autopsies of yellow fever that I have witnessed. Besides, this exquisite tenderness is not confined to the epigastrium. It is experienced all over the abdomen and even in the limbs, but is certainly most severe over the stomach.

It appears to me that this morbid sensibility must be referred to a condition of the nervous substance, induced by the preceding violent actions to which the whole system has been subjected. The tissues have been changed in their constitution; not only as regards the minor points of structure, but also chemically. The nervous substance has suffered in common with the rest, and hence the effect. In short, the exquisite pain is owing to a morbid condition of the nervous substance, not to increased action in the parts. It is a most fatal symptom.

Another phenomenon which seems related to that of passive hæmorrhage, is the appearance of petechiæ. They never appear until the febrile symptoms subside, and seem, in truth, to be nothing more than small spots of blood congested in the tissues. Mosquito bites also become dark and livid, and much resemble petechiæ. They are both outward signs of that complete prostration of the powers of life, that torpor and want of action, in which the system is left after the preceding violent actions have subsided.

Another and most fatal symptom frequently appears towards the close of the attack. It is a total suppression of the urinary secretion. The kidneys appear to have been completely disorganized by the foregoing violent actions.

There are also some minor varieties of symptoms, which it may be worth while to take notice of, and which I shall here

group together. The bowels are sometimes costive and with difficulty operated on, while in other cases, or at other periods, they are extremely relaxed. The dejections also differ exceedingly in appearance. At times they are exceedingly large and offensive; at others, they are watery and slightly tinged with coloring matter. Their color, too, varies, being sometimes of a clay or ash colored hue; at others, they are composed of dark, tarry, fuliginous matter. Sometimes they seem to be made up almost entirely of water and bile, which in certain cases is secreted in immense quantity. The two last mentioned evacuations, it has been supposed, are caused by the action of calomel; but I have met with them often in cases treated by myself, in which not a grain of calomel or any other mercurial had been employed. The dark and tarry dejections have also been esteemed a certain sign of a favorable termination; but I have met with it repeatedly in post mortem examinations in the largest quantities—the bowels being literally full of this substance.

The tongue also presents different aspects. Instead of being dry and furred, it is frequently moist—preserving, indeed, an appearance almost natural throughout the case. In truth, those who see much of yellow fever soon learn to distrust the tongue in their prognosis.

Though most of the fatal cases are accompanied with black vomit, the rule is by no means universal; nor is black vomit necessarily a fatal symptom. I have never passed through an epidemic in which there were not a few cases of recovery after decided black vomit had been thrown up. In one case, it was thrown up for two days, and recovery took place.

Towards the close of the attack, a most distressing hic-cough sometimes supervenes. It is exceedingly obstinate, and will yield to nothing; though not always fatal, it is nevertheless a very dangerous symptom.

The skin, too, presents many and remarkable varieties of color. Sometimes it is pallid, or of a blueish hue—at others, of a beautiful pink, diffused more particularly over the chest,

throat and face. Its usual color, however, is (towards the close) of a dun yellow. In some cases the yellow hue comes on only after death.

Active hæmorrhages from the nose or bowels sometimes occur on the first or second day. These must not be confounded with the passive hæmorrhages already spoken of. When not too severe, they are rather favorable than otherwise.

Such are the most prominent symptoms which characterize yellow fever during the life of the patient. Let us now follow him to the dissecting rooms, and see if we can ascertain from the dead body the causes of this frightful train of morbid phenomena.

#### POST MORTEM APPEARANCES.

*The skin.*—Our attention is first called to the state of the skin. A few hours after death, nothing is more common than to find all the lower or depending parts of the body in a state of congestion—literally black from accumulation of blood. And this is not confined to the external parts; we shall find the same at the base of the brain; in the depending portions of the intestines, and particularly of the ileum. We shall also find this congestion more or less in the lower portion of the lungs, and I believe it constitutes in many cases what is mistaken for inflammation of the stomach towards the cardiac orifice. As I have already observed, the tissues seem to be partly disorganized by the disease; they have lost, in a great degree, their natural elasticity; the capillary spaces are enlarged, and the blood settles down from the mere effect of gravity.

The yellow hue of the skin—what is it owing to? An obvious answer is, that it is caused by the absorption of bile. But this admits of much question. The color, in the first place, does not so very closely resemble the yellow skin of jaundiced persons—an experienced eye may perceive the difference. In jaundice, the urine is colored by bile; but it is

not so in yellow fever. To be sure, jaundice sometimes supervenes in yellow fever, but this is rare, and when such is the case, the urine is tinged. I rather attribute the yellowness to the change of condition which the blood and tissues have undergone. We know, indeed, that a similar appearance may be produced artificially—by a contusion, for example. And, indeed, the color of old contusions resembles the yellow skin of patients in this fever, much more than that produced by jaundice. Again, in cases that die of jaundice we shall generally detect a complete obstruction in the ductus choledochus, an obvious cause for the absorption of bile. In yellow fever subjects, though I have often made the investigation, I have never discovered any such obstruction.

But let us open the body.

*The brain.*—This organ is sometimes congested with blood; at other times it contains a little water in the ventricles and under the arachnoid. The pia mater is sometimes finely injected; the dura mater is rarely affected, and when so, presents only a few small sanguineous spots on its serous surface. In most cases, the brain presents no appreciable lesions whatever. The like may be said of the spinal marrow, and sympathetic ganglia.

*The lungs* are sometimes obviously congested with blood. They do not retract as they usually do, when the sternum is removed. They are also, in parts, much discolored. In one case, examined in 1839, a portion of the left lung, about the size of a dollar, was found in a state of apoplexy—the blood was extravasated and coagulated. The mucous membrane lining the trachea and bronchia, is also in many cases finely injected or spotted with blood. In numerous cases—perhaps in a majority—the lungs present no lesion that we can detect.

*The heart* is very rarely if ever affected. The endocardium is sometimes slightly discolored, but I believe this is only met with in subjects that have been some hours dead, and appears to be occasioned by absorption of the coloring matter

of the blood left in the cavities. Small blood spots are also sometimes found on the endocardium, and seem to be analogous to the petechiæ on the skin. We generally find coagula in the heart in this disease, but they contain more coloring matter, and are softer than those we meet with in cases of death from most other diseases.

*The liver.*—I have never seen any lesion in this organ which could be attributed to the effects of the disease. There is no organ in the body which presents such various appearances as this; at times, being very dark; in other cases, presenting a pale yellow aspect. In the cases examined at the Charity hospital, it is not unusual to meet with chronic affections of this organ, but as we meet with an equal number of cases at other seasons, it is plain they have nothing to do with yellow fever either in cause or effect. Indeed, as I have heard it sensibly remarked, there is no organ in the body with which the disease may take so many liberties, without material injury to health, as the liver. We frequently find it in conditions which are evidently of long standing, and such as to produce astonishment, that the individual could have lived without manifesting his disease, by striking and unequivocal symptoms.

The liver sometimes contains less blood than we usually find in the viscus, and in those cases it is paler and drier than usual. At other times, however, it is engorged with blood, and bleeds freely when cut; but these appearances it is subject to in common with all the organs, and the existence of one or the other appears to depend much upon the condition of the patient at the time of the attack, and the treatment he has undergone. In cases in which the lancet has been used freely, we shall generally find a pale yellow liver.

*The gall bladder* in most cases contains its usual quantity of bile, which is to all appearances healthy. Sometimes it is greatly inspissated; in other cases the bile is more mixed with mucus than usual. I have sometimes found the gall bladder

containing only a little glary mucus; these cases are rare. The mucous coat of the organ is sometimes, like other mucous tissues, injected or spotted with blood. In most cases it is not affected.

*The spleen* is usually sound. It is sometimes engorged with blood, and in consequence is enlarged and softer.

*The pancreas.*—I have never seen this organ diseased in yellow fever.

*The urinary bladder* is rarely changed in appearance. Its mucous secretions are sometimes increased in quantity, and in a few cases the mucous membrane is dotted with small points of blood.

*The kidneys* sometimes contain a great deal of blood. When cut into, we can seldom find any appreciable lesion. In some cases, the mucous membrane of the pelvis and infundibulum is, like the mucous coat of the bladder, minutely spotted with blood.

*The stomach and intestines.*—In a great majority of cases, the stomach is finely injected with blood. Not only is the mucous membrane thus discolored, and that too, in cases examined almost immediately after death, but we find also abrasions of the tissue in pit-like holes and furrows. It is beyond all doubt that this engorgement existed before death. In some cases the whole surface of the stomach is affected; in others, the effusion and injection is confined to the cardiac or pyloric portion. The submucous cellular tissue is also generally injected. The duodenum and a large portion of the other small intestines are frequently found in the same condition.

In some other cases, though these are far more rare, the stomach, duodenum and other intestines present us with an almost entire absence of appreciable lesions. Prying and curious eyes have found here and there a few slight red spots,

and have convinced their owners that they detected thickening and softening of the mucous membrane. I confess that I have not been able to see this, and the conviction has been forced upon me that in these cases we could not lay our finger on any lesion which would account for the foregoing phenomena, or the death of the patient. But by these remarks, I do not intend to be understood as inferring that these organs have not been diseased. On the contrary, I believe that in all cases of death from yellow fever, the stomach suffers, and suffers most severely. All I contend for is, that we are not entitled, from the facts before us, to say that it has been inflamed—and inflammation in my creed is not synonymous with *disease*, but expressive merely of a particular species of morbid phenomena. Those who contend that the stomach must necessarily have been inflamed, reason, not from facts to theory, but from theory to facts. They are guilty of hypothetical not inductive reasoning. The stomach has doubtless suffered, since all the organs in the body—every tissue—must, more or less, be altered in its constitution, after undergoing such violent morbid actions. But in the cases we now speak of, the stomach seems to have suffered not a whit more than the other organs.

As the stomach usually contains black vomit, it may be argued that the tissues have relieved themselves, by pouring the contents of their vessels into the cavity of the organ; but if this be true, how comes it that in other cases in which we also find the stomach full of black vomit, we meet with a mucous membrane literally engorged with blood?

The large intestines and the lower portion of the small, are not so often found congested as the stomach and duodenum, yet such a condition is by no means rare.

Before leaving the stomach, it may be well to remark, that in some cases it presents a very singular aspect, caused by artificial means. It is difficult to describe. The mucous tissue, when washed, has a sort of marbled appearance, with faint lines running here and there, and intersecting each other. This is owing to the acid solution of sulphate of quinine

administered in the latter stages of the disease. That such is the fact has been proved by immersing a stomach not having this appearance in a solution of quinine.

A remarkable feature in yellow fever is the frequent occurrence of intussusceptions of the small intestines. These were exceedingly common in autopsies made in 1839. The quantity of intestine invaginated sometimes exceeded a yard.

In certain cases we found Brunner's glands presenting a miliary aspect. Whether this was connected with the disease or not, I do not know.

In some cases of a typhoid type, in which there existed before death a low nervous delirium, we found sometimes ulceration, and at others, hypertrophy and softening of Peyer's glands.

Ulceration sometimes occurs in Brunner's glands, but rarely, and when it does take place, we generally have hæmorrhage from them.

The mesenteric glands are sometimes considerably enlarged. This occurs generally in cases in which death occurred after the seventh or eight day. I have also seen them much enlarged in cases treated on the mercurial plan.

*The blood.*—This fluid does not present to us any strong evidence of those changes which we might expect after the system undergoes such violent actions. It has been said that it loses its coagulability. Whether such is not the fact in certain cases I will not undertake to say, but in a great majority it is certainly not true, for we find coagula in the heart, and blood taken from the larger vessels generally coagulates after a while. It is unquestionably true, however, that it requires a much longer time to coagulate than blood usually does, and that the coagulum is larger and softer. Blood drawn from the arm rarely if ever presents a buffy coat; nor have I ever seen it cupped.

*Black vomit.*—Of this fluid mention will be made under the head of pathology.

The rest of the body, such as the cellular, fibrous, cartilaginous, osseous tissues, &c. present nothing remarkable. The muscles in many cases are darker and drier than usual.

#### PATHOLOGY.

The nature of this disease must be inferred from the history of its appearance—from its course and symptoms—from some points in its treatment, (to be spoken of hereafter,) and from the lesions found after death; for the special cause of it is utterly unknown.

I regard yellow fever as an idiopathic fever *sui generis*, and to be caused by a poisonous agent, also *sui generis*, and of an organic nature.

Taking for granted, then, that yellow fever is produced by poison, (an assumption to be maintained hereafter,) the question that first presents itself is, how the poison affects the system.

Having been taken into the circulation, it will wander with the blood to the different tissues. It matters not for our present purpose, what particular tissue or tissues it may fall upon. It must, whenever it falls, set up a morbid action, and this we are not obliged to suppose must be one of high intensity—that is, inflammation. The actions of life go on between the molecules of the tissues and of the arterial blood. Any foreign substance in solution with the blood, must produce some perversion of the vital process, be that perversion great or small; the effects will depend on the chemical nature of the agent. The actions set up may be above or below the normal standard, so far as regards intensity—or they may remain of the same intensity. In other words, disease and inflammation are not synonymous terms; and this is particularly observable in yellow fever. The fever subsides on the third or fourth day, the pulse falls to the normal standard, the skin is cool—all evidence of high action is wanting, but the disease goes on, and for several days. The skin becomes yellow, the tongue dry, the urine scanty, the eyes injected, hæmorrhages

occur, etc. In short, the patient is precisely in the most dangerous period of the attack. All this is in striking contrast with a case of symptomatic fever, such as pneumonia, pleurisy, etc.

As the poison is carried by the blood throughout the system, it is evident that some portion of it may fall upon the central axis of the nervous system, (the spinal cord,) and affect that organ. Now the spinal cord cannot be affected without every tissue in the body being also affected through the medium of the nerves. Modified in its own actions, it will radiate its affections as from a centre. Hence in diseases arising from poisonous agents introduced into the circulation, there are *two* sources of the constitutional symptoms—one in the tissues generally, or wherever the poison may be thrown—and the other, in the spinal cord. In this, again, these fevers differ from the symptomatic.

The spinal cord being affected to a certain point, the constitutional symptoms break forth, a rigor is experienced, followed by violent reaction.

But though this is the usual course of yellow fever, it is by no means universal. We sometimes meet with what are termed congestive cases, in which there is no action of a high grade. On the contrary, the system is depressed below the normal state. The pulse is slow, and the hands and feet cold. The term fever applied to such a condition, is evidently a misnomer. We might with as much propriety apply it to a case of collapse in Asiatic cholera, or to a case of poisoning by a large dose of laudanum. The poison in these cases so profoundly alters the nervous substance, that reaction cannot take place. The peculiar disease goes on, however, though fever be absent, as is evidenced by the blood, its want of fibrine, the occurrence of passive hæmorrhages, black vomit, suppression of urine; in short, all the characteristics of the disease.

With respect to the lesions found after death, they are evidently the consequences of the disease; and if any proof were wanting of this, it may be found in the fact, that in the

worst cases—those of a congestive character—no lesions occur. I regard the lesions in the stomach and intestinal canal, therefore, as I do the yellowness of the skin, the injection of the eyes, the passive hæmorrhages from leech bites, the scant and highly colored urine, etc. not as the causes of the fever or other symptoms, but as effects. They are all but so many different results of the morbid actions to which the system has been subjected; and he who attributes the appalling train of morbid phenomena which characterizes this disease to the lesions he finds after death, judges, it seems to me, about as wisely as he who should attribute the conflagration of his dwelling to the ashes which he finds in its place. Nor need I be told that I am admitting the existence of a disease which has no location. I do no such thing. I am as well aware as any one, that disease is no entity—that it is a word expressive merely of perverted actions in the tissues. What I contend for is, that yellow fever is not gastro-enteritis, or inflammation of any other particular organ—nor proceeds from such. In short, that black vomit, suppression of urine, passive hæmorrhages, and the rapid and fatal course of the disease, are owing to other causes—to the influence of poison.

But are those congestions which we find in the stomach, intestines and elsewhere, to be considered as the results of inflammatory action? I very much doubt it. We sometimes find them in the lungs, than which no organs are more disposed to the effusion of coagulable lymph. But we never find hepatization of the lungs in yellow fever; I mean, of course, as caused by that disease; not by chronic affections. They seem indeed to be connected with the fever, for the higher the febrile symptoms, the more frequently we find congestions in the different organs. But on the other hand, we can witness with our eyes these congestions taking place long after the fever has entirely subsided: we see petechiæ forming, the eyes becoming hourly more injected, old leech bites becoming livid, the gums and tongue swollen and red, etc. Now in all these cases it is simply passive congestion. There is no action characterizing inflammation, such as increased

heat, increase of sensibility, or stronger or quicker pulse, attending the formation of these hyperæmia. If such is the case on the exterior, why should not the same process take place in the interior of the body? There is not one fact to militate against such a supposition.

But at the same time, if these congestions are not evidences of pre-existing inflammations, it must be allowed that the previous high fever has prepared the tissues for them; since, (as has already been mentioned,) in congestive cases, we rarely find them.

The passive hæmorrhages, so often mentioned, require a few words. They occur, as has already been related, from the bowels, gums, nostrils, etc. The whole system seems to have been profoundly altered. The normal relations between the blood and solids are broken up. The blood arrives in the tissues and passes through, wherever it can find an exit, by the mere mechanical *vis à tergo* action of the heart. It coagulates with extreme difficulty. In many cases every variety of styptics have been used in vain. Even actual cautery is of no avail—the blood oozes forth from beneath the eschar. The only means are mechanical, which suffice when they can be applied.

One of the most striking traits of yellow fever is the occurrence of black vomit. It has been correctly described as resembling coffee grounds in a thin solution of gum arabic, or infusion of flax seed. But it varies greatly as to color. Sometimes we can see but a few striæ mixed with the flocculent gray matter already spoken of. These striæ are most apt to be found on the sides of the basin. In an hour or so the fluid ejected from the stomach becomes darker on account of their increase. Sometimes, instead of the coffee grounds appearance, the fluid thrown up approaches in color that of venous blood. In some cases the vomit can be distinguished in nothing from blood in an uncoagulated dissolved state. In short, between decidedly formed black vomit and blood, there are numberless shades—they run into each other by imperceptible degrees, and the distinctions that have been made by some

authors in the appearances of the matters ejected from the stomach, are altogether artificial.

In the quantity thrown up, there is also great difference in different cases. Some throw up enormous quantities—others die after having ejected but a few striae.

This fluid has never been subjected, that I know of, to a complete chemical investigation.\* I think, however, that enough is ascertained concerning it to satisfy us of its origin and general nature, to wit :

It is composed of solid particles held in suspension by the liquid—since they may be separated by filtration.

It is acid in reaction. Litmus paper is turned red, and turmeric paper changed by an alkali, is restored to its original color.

A white precipitate is thrown down by nitrate of silver, which is again redissolved by ammonia, but not by nitric acid. This indicates that the precipitate is probably a hydro-chlorate. Hydro-chloric acid, it is well known, has been detected in the stomach by almost all experimenters.

A fluid, so like it as to deceive most experienced persons, can be artificially formed by pouring a little hydro-chloric acid upon blood. The addition of a little mucilage will render the resemblance still stronger.

I once, with Dr. Thos. Hunt of this city, performed the following experiment: A man was brought into the dead house while we were there. Upon examination, there was no black vomit in his stomach, but a whitish acid smelling liquid, amounting to about half a pint. Into the stomach, containing this liquid, some blood from the vena cava was poured. At first, we thought the experiment had failed, and we returned to other investigations. Upon examining the fluid, however, after the lapse of 10 or 15 minutes, it was impossible to distinguish it from specimens of black vomit with which we contrasted it.

Now, when we take into consideration these facts, and also

\*It has been, since this paper was written.

that, in place of black vomit, it is not unfrequent to find blood in the stomach, and that between blood and black vomit there are numberless shades, we can hardly, I think, avoid the conclusion, that black vomit is simply a passive hæmorrhage which has taken place from the coats of the stomach. It is absolutely the same in nature with the hæmorrhages from the gums, nostrils, bowels, &c. and different from them in color, merely because it has come in contact with the acid contents in the stomach.

That it is a much more fatal symptom than other hæmorrhages, is easily explicable from the great importance and manifold sympathies of the organ which pours it forth.

A reason for the frequent occurrence of hæmorrhage in the stomach, may also be found in the structure of the organ—being, at the same time, one of the most porous and lax in its texture, and one of the best supplied with blood in the body.

#### PROGNOSIS.

Some of the symptoms I have already spoken of as being unfavorable; but it may be worth while to sum up their value in a general way.

A case of yellow fever promises to terminate well or ill, in proportion to the development of the fever, and according to the absence or presence of nervous symptoms. When the rigor is slight; when the ensuing fever is well developed; when the pulse is open, full, and strong, beating from 108 to 120; the eyes a little injected; the tongue slightly furred; when the pains in the head, back and limbs are severe; the case is likely to do well, provided it be properly treated and nursed. On the other hand, where there is a strong disposition to sleep; where there is not much complaint heard; where there is either sullenness, listlessness, and extreme languor, or agitation of the mind from fear of death, or any other cause; where the pulse is weak and quick, or easily changed in its beats by muscular motion, such as sitting up in bed; or, where the skin is pale, sallow, or cool to the touch, the case

is one of extreme danger. In the above remarks, I refer to symptoms occurring in the beginning of an attack; during the progress of the disease, other symptoms make their appearance; these will be spoken of presently. All marked changes in the usual expression of the countenance, either at the commencement, or occurring as the disease progresses, are decidedly unfavorable symptoms. Contraction of the brows, risus sardonicus, twitchings about the mouth, picking of the bed clothes, are of this character. It is another unfavorable sign to find the patient listlessly lying on the side of the bed with his head drooping over. Petechiæ are also unfavorable symptoms, particularly if they make their appearance as early as the third day. Great and unaccountable depression of spirits, either in the beginning, or in the course of the attack, is an exceedingly bad symptom. Delirium, coming on late in the attack, is a fatal symptom, so, also, is suppression of urine, which must not be confounded with retention. Sighing and moaning are bad symptoms. Irritability of the stomach, coming on after the febrile excitement has subsided, is another bad symptom; in the beginning, however, I do not consider it of much consequence, if the other symptoms be favorable. Neither do I so consider jactitation, when it occurs early in the attack, and is caused by pain; jactitation without pain is another thing, and a very bad symptom. When the tongue continues to look clean and healthy for a day or two; or when it becomes clammy, after the fever has subsided, the prognosis is unfavorable. Passive hæmorrhages and black vomit have been already spoken of. With regard to the sweats so common during the febrile stage of the attack, they are thought by many to be favorable. I do not think them of much consequence, one way or the other; certainly, I have lost patients, in spite of every attention and precaution, who perspired finely during the first days.

I believe I have now spoken of the most important of the symptoms, with the exception of the strange and exquisite tenderness, which comes on late in the disease, at the epigastrium, and, indeed, over all the body. It is the most fatal symptom I know of.

## TREATMENT.

Of all the diseases which afflict the human race, there is none that requires more unremitting care and attention on the part of both physician and nurse, than yellow fever. Accidents, or acts of imprudence, which, in other diseases, are mere trifles, are of tremendous importance in this. The mere getting out of bed has cost many a man his life. Exposure to cold currents of air, or negligence to take the requisite precautions against a change in the weather, has been equally fatal. A man in this disease, however safe the physician may think him, is hovering between life and death—a trifle may decide his fate. Hence the great necessity, the all important need of good and experienced nurses.

There is, from the very commencement of the attack, a great and rapidly increasing prostration of strength, inconceivable to those who have never experienced the disease. The mind cannot act; the senses, at first exceedingly acute, become during the progress of the disease, indifferent to impressions; the muscular power is almost annihilated; the patient is indifferent to fate, or morbidly anxious about trifles. The extraordinary disturbance in the nervous system, its extreme liability to undergo change from the slightest impressions, enforce upon the attendants and physician, the greatest prudence and solicitude. Experience has taught *them* this, but, unfortunately, all injunctions are frequently lost upon the sufferers. *They* cannot be made to understand how the mere getting out of bed, or even the sitting up in it, can be of so much importance as they are asserted to be. Their feelings deceive them; they make in some unguarded moment the trial, and conviction comes too late.

When a person is taken sick with this disease, no time is to be lost—not a minute. The physician and nurse should be with him as early as possible. His room should be in some quiet place, and, if possible, in the second story, on account of the dampness of the ground floors. The windows should

be closed, for many suffer much from intolerance of light. The room should be well aired, care being taken to protect the patient from currents. All persons, except those attending on the sick, should be rigidly excluded; conversation on the part of the patient or others prohibited. These last injunctions are all important, for it is not an uncommon thing for the sick to be annoyed with unseasonable visitors; who, to gratify an idle curiosity, rush in where they can do no possible good, and may inflict measureless harm. The patient should not, from the very hour of his attack, be permitted to rise from his bed for any purpose whatever. No matter how supported, or with what precautions and care he be taken out, it is always dangerous and often leads to a fatal result. His evacuations should be received in a bed-pan and removed immediately from the room. There ought, if practicable, to be two or more nurses, so that the patient should never be left alone for a single instant. His bed clothes and person should be kept as clean as possible; but all changes of linen, etc. without absolute necessity deferred until the patient is out of danger.

As to the medical treatment, the like precautions are necessary. The physician should never forget, for an instant, the peculiar character of the disease, its treacherous nature, the rapidity with which alarming symptoms come on. He must bear in mind that the patient is hourly losing strength; that his nervous system is becoming more and more deranged. He must remember that there is no safety for his patient until the disease has run its course, and convalescence established beyond all doubt. Those who see the disease for the first time are exceedingly apt to make a serious mistake: the fever subsides on the third or fourth day, the pulse and skin are good, the patient complains of no pain, and the physician supposes him out of danger. The truth is, the danger is then most imminent—the most critical period of the disease has arrived, and the patient is required to be watched more assiduously than ever. It is at this stage that a purgative or any other medicine improperly administered may decide his fate.

As to the details of the treatment, they must be left to the judgment of the physician. Any specific treatment is just as absurd in yellow fever as in any other disease. The physician is not called in to treat an abstraction, but a sick man. The treatment must be varied according to the peculiarities of the cases. Remedies beneficial in one case may be most injurious in another; and success in practice will depend, in a great degree, upon the sagacity and acquirements of the physician.

Certain modes of practice, however, have prevailed here, as elsewhere. All have had their advocates, who point to results as evidences of their value. If we were to rely upon the statements of the partisans, it would be difficult, indeed, to form an opinion of their respective merits; but it must be remembered, that patients in yellow fever die, and that others get well, under all sorts of treatment. I was once called to an Irishman, who had been sick five days, and who had done nothing but drink whisky the whole time. He was suffering with great irritability of the stomach, but recovered. It is not, then, from such statements that we can form any correct opinion concerning the *methodus medendi* in this disease. We must fall back upon the broad principles of pathology and therapeutics.

Of the methods in vogue, we may point out three that have had the largest number of advocates. They may be denominated the calomel, the depleting, and the quinine practice. I shall proceed to make some comments upon each of them.

*Calomel*.—I should, perhaps, speak of this practice in the past tense; at least, I know of no physician in New Orleans who pursues it, or mentions it with respect. Absurd as it is, however, it has had as strenuous supporters as any other delusion in medicine. It has not been more than twelve years, when he was a bold man who undertook to affirm that a case of yellow fever might get well without the aid of calomel. The practice seems originally to have been adopted in sheer desperation, and continued from the same cause.

The treatment consists in bringing the patient, as soon as possible, under the influence of the drug. For this purpose ten or twelve grains are administered every two or three hours. Should time pass on, however, and the patient show no symptoms of salivation, the dose is either increased or the intervals between its administration lessened. Should we ask for some pathological reason for such practice, we are told that the calomel acts by emulging the liver; that experience has pointed out the necessity of the treatment, and that every case is saved in which pyalism occurs. Let us examine these arguments.

As for the liver, the symptoms of the disease throughout its whole course, as well as *post mortem* examinations, show that it is by no means particularly affected. The passage of bilious stools, during the first days of yellow fever, is as common an occurrence as we meet with, though not a grain of any mercurial has been taken. We find, also, bile in the gall bladder after death; so that the whole argument about the liver is just upset by these facts.

It may be contended, however, that the yellow hue of the skin, &c. is caused by the accumulation of principles of bile in the blood; and that, therefore, the liver should be excited to increased action in order to eliminate these principles from the system. I do not believe that the yellow hue of the skin is owing to bile; we frequently see the skin at first of a bright pink, gradually assume the yellow tinge, as if it depended upon some change in the coloring matter of the blood. But, for the sake of argument, let us grant that the bile is the cause of it; does the administration of calomel prevent, or even retard its appearance in the slightest degree? Not at all. The yellow skin—the passive hæmorrhages, &c. are just as bad, to say nothing more, in cases treated with mercurials as in those in which not a grain has been given.

But, whatever effect calomel may have upon the liver, it is very plain that administered as it usually is, it must first act upon an organ just as important to the welfare of the system, and which, *post mortem* examinations show, is by far the most

frequently affected. I mean the stomach. The connections of this organ with the rest of the system are so numerous, that some have even called it the centre of the sympathies; its extreme irritability is one of the most marked traits of the disease; its serous derangement is what the physician most particularly dreads; and can any one believe that we shall shun this danger by administering a mineral drug, such as calomel, every hour or two?

As for experience proving the necessity of administering calomel, I shall dismiss the subject with the remark, that experience has proved just the contrary.

But all cases recover, in which mercury produces ptyalism! admitting this to be true, which is by no means the case, it is but reasoning *post hoc ergo propter hoc*. The disease runs its course—the fever subsides—the patient recovers *in spite* of the remedy, and the poison introduced into the system then takes effect. Instead of a rapid convalescence and a speedy restoration to health, as is usually the case in yellow fever, he is the martyr of a most noisome and insufferable disease, for weeks or even months; and is fortunate indeed if he gets off so well.

In 1833 there occurred a phenomenon which was as common as any other in the disease. It was suppuration and ulceration of the parotid glands. It is now rarely met with, and the reason is, less calomel is given.

The parotids were not the only glands that suffered. In the autopsies of that year, it was as common a thing to find the mesenteric glands swollen and enlarged, as to meet with any other lesion.

By the foregoing remarks, I do not wish to be understood, as inculcating the total abandonment of calomel in yellow fever. Given as a cathartic, in the commencement of an attack, I have seen it act admirably. It causes but little nausea, and will bring away feculent matter, when castor oil or saline purgatives fail to do so.

*Depletion.*—All the characters of this disease would seem

to inculcate, in the strongest possible manner, the greatest reserve and discretion in the use of the lancet. Of this instrument, all powerful for good or for evil, according to the mind that directs it, it has been long ago remarked, that, perhaps, its victims numbered more than those of the sword. Sure, I am, it has fully done its work in yellow fever.

On the first days of the fever, before the patient is much prostrated; when the pulse is full and strong; when the pains are severe; when the patient is of robust constitution, venesection unquestionably does good. Whenever, during the febrile period, it is to be feared that congestion is forming in any organ—the brain, lungs or stomach, the lancet should be employed, but employed with prudence. The physician should never forget that this is a disease arising from poison—that prostration is rapidly approaching, and that by improperly using the lancet, he is hastening its advent and adding to its intensity. When the patient is of a nervous temperament, or feeble constitution—when any ataxic symptoms supervene, such as nervous delirium, &c. the lancet should not be thought of. Some have used this instrument, as if they thought it possible to bleed the disease out of the body. A greater error was never committed. Large quantities of blood are taken from the patient, who has been made to sit up, and syncope supervenes. In the course of an hour or so, observe his pulse. Has his fever abated? are his sufferings less severe? Not a whit. His skin is as hot, his pulse is as bounding as ever, but has lost its force. Standing some distance from the patient, we can see the carotids violently throbbing. We feel the pulse, and it has a peculiar thrill. Again and again is the lancet employed; and more and more grave all the symptoms become. The patient begins to wander in his thoughts, and speaks incoherently. “The brain is becoming inflamed,” says the physician, “and he must lose more blood;” again the lancet fulfills its office, and a change, sudden and appalling, takes place. The patient becomes cold and pale—a clammy sweat breaks out over the body—the pulse sinks—black vomit is thrown up in

large quantities, and death soon follows. This is no fancy sketch—it is what may be witnessed every epidemic year.

The nervous system is particularly liable to derangement in yellow fever; the most fatal of all the symptoms are those which indicate affections of the brain. Now, there is nothing that has a more powerful control over the nervous system than the lancet, and hence extreme caution is necessary in its use.

But for what purpose is so much blood taken from the system? What indication is to be fulfilled? Is it to relieve organs suffering from inflammation? *Post mortem* examinations ought to settle the question. In the worst cases, those of a congestive character, there are scarcely any lesions to be found after death; and as for the congestions usually found in the stomach and intestinal canal, it is far more probable that they are of the same nature with the petechiæ, and other congestions, which we see form on the surface of the body, than that they are the results of inflammatory action.

We are told by Andral, that in idiopathic fevers there is a diminution of fibrine in the blood. In yellow fever the blood is remarkably slow in coagulating, and when passive hæmorrhages occur it will hardly coagulate at all. Assuredly we cannot expect to increase the proportions of fibrine in such a disease, by blood letting.

With regard to the use of other means of depletion, such as leeches and cups, the same prudence and caution are required. As they take blood, however, in a slower and more gradual manner than the lancet, there is not the same risk of affecting the nervous system. They are, therefore, much safer. Cups are frequently very serviceable in relieving the intense pains in the loins and head, which the patients suffer during the febrile period.

*Sulph. quinine.*—This remedy had often been employed as a tonic during the latter days of an attack, but in 1839 a new mode of administering it was adopted at the Charity hospital, and in the private practice of many physicians. This mode,

so far as I know, was first put in practice by Dr. J. M. Mackie of this city, who adopted it at the suggestion of Dr. Thomas Hunt, also of this city. Dr. Hunt was led to believe in its efficacy from a review of the writings of Maillot, published in the July number 1839 of the British and Foreign Medical Review.

The new mode of administering the sulph. quinine may easily be inferred from the foregoing extracts. It consisted in waiting for no abatement of the fever, but in promptly giving the sulph. quinine as soon as possible after the attack. The dose varied from twenty to eighty grains, given in a little cold water. If the stomach was very irritable, it was given by injection. When the practice was first introduced, a cathartic was generally first given, and the administration of the quinine deferred until the bowels were moved. This practice was afterwards abandoned, on account of the loss of valuable time. In strong and robust constitutions, the lancet was employed for the purpose of producing a temporary remission, during which the quinine was given. This practice was decidedly beneficial. If the first dose failed in eight or ten hours to produce an apyrexia, a second was given. The earlier it was given the better, but *it should not be given after the second day*. This is a most important point in the treatment; I have given it on the third and fourth day, but always with injury to the patient. It increases the irritability of the stomach, and causes the tongue to become dry. In addition to the sulph. quinine, other remedies were used according to the circumstances of the case: such as would suggest themselves to any physician.

Before venturing to give the sulphate of quinine in such large doses and upon such a raging fever, Drs. Hunt and Mackie performed a number of experiments to test its physiological action. The experiments were performed in 1839, at the Charity hospital, upon convalescents from different diseases. From notes furnished me by Dr. Hunt, I transcribe the following cases:

CASE I.—At 20 minutes of 10 A. M. pulse 72; took 15 grains of sulph. quinine. At 11 A. M. pulse 60; has slept; complains of heat at epigastrium; feels a little dizzy; pupils slightly dilated. At half past 12 P. M. no other change.

CASE II.—At 10 A. M. pulse 56; took 11 grains. At 11 A. M. pulse 48; has slept; has slight ringing in the ears; sweating freely a short time after taking the quinine; no restlessness.

CASE III.—At 15 minutes of 10 A. M. pulse 64; took 9 grains. At 11 A. M. pulse 52; has slept; pupils slightly dilated; no other change.

CASE IV.—At 15 minutes of 10 A. M. pulse 100; took 20 grains. At 11 A. M. pulse 96; has slept; pupils slightly dilated; no other change. At 15 minutes past 11 A. M. took 15 grains. At half past 12 P. M. pulse 92.

All these cases were watched. The effects, as narrated, gradually wore off, without any other change.

It may be mentioned here, that when the sulph. quinine was given in large doses, a part of it was found, in the experiments made for that purpose, unaltered in the urine.

So much for the method of administering the sulphate of quinine; it now remains to speak of its effects. The fever in most cases was cut short as if by enchantment. I shall never forget the surprise I felt the first time I witnessed its effects. Three patients in the wards of Dr. Mackie were put under its influence. The conditions of the three were pretty much the same—as also were the results; the description of one case will therefore suffice for the whole. The patient, a robust young man of about twenty-eight years, had been taken with yellow fever at 1 P. M. He was prescribed for the same day, at 6 P. M. Ten cups were ordered to the epigastrium, 30 grains of sulph. quinine to be taken by the

mouth, immediately after the cupping, and 40 grains by injection. He had been cupped before I saw him, but had not yet taken the quinine. His condition was as follows: pulse 120, full and strong; great heat of skin; great pains in the head, back, and lower extremities; tongue a little furred; eyes heavy and a little injected; great restlessness on account of the pains. I saw him next morning, between 6 and 7 o'clock. He was perfectly free from pain; the pulse was at 84; skin cool; in short, every vestige of disease had disappeared. From prudential motives, he was kept in the hospital four or five days, and then discharged. There was never any return of the disease.

The other cases terminated in a similar manner, and the practice was soon adopted by a number of physicians, myself among the number. The results were, in general, highly satisfactory.

I shall say but few words with regard to the manner in which quinine acts, to produce such effects. No doctrine of stimulants, counterstimulants, or sedatives, can reach the explanation. Nothing that we know of can be substituted for quinine: its effects are, therefore, specific, and are owing to its chemical character. I believe that it acts, like the poison of which it seems to be the antidote, directly upon the nervous substance—breaking up the whole condition upon which the morbid actions depend, but in a manner perfectly inexplicable in the present state of science. If there be any way of cutting short an idiopathic fever, it is assuredly to be effected by quinine. But there are certain facts which lead me to believe that the disease under consideration runs its course, even after all febrile symptoms have succumbed to the power of quinine, and indeed after all morbid symptoms whatever have disappeared. In 1841 I lost a patient, and in 1842 another; one on the 6th, the other on the 7th day, in whom the fever had been cut short, as usual, by the administration of quinine. They lay in bed for two or three days without a single symptom of disease, and, indeed, were kept in bed more from motives of prudence, on account of a change in

the weather, than for any other reason. Yet they both died with black vomit.

I have remarked in another place that the pathology of yellow fever was, in part, to be inferred from some points in its treatment. I alluded to the effects of quinine in the first stages of the disease. Surely these effects give no support to the supposition that the disease arises from local inflammation.

From the above observations, concerning the effects of quinine, it will not, I hope, be understood, that I advocate its administration in all cases whatever. As I have before remarked, there can be no specific treatment for yellow fever, or any other disease. When in the commencement there is great congestion of blood in the brain, or any other important organ, or where the fever supervenes upon chronic inflammatory diseases, I would most certainly resort to other means. Nor would I be understood as speaking of quinine as an infallible remedy. The practitioner to whom the disease is a new one, will soon discover that in certain cases, particularly those of the congestive and ataxic types, that quinine is as inefficacious as any other remedy. In cases, in which the fever is well and fully developed, it will, unquestionably, cut that fever short, and thus prevent the formation of those local congestions which are produced by the febrile action. In this consists its value, and assuredly, it is a great one.

It remains to say a few words concerning other remedies sometimes employed in the course of treatment. We shall first speak of baths.

*Cold bath.*—I have but little experience in the use of cold baths, as I have been averse to employing them from pathological principles. There is a great tendency to sudden changes in this disease, and the congestive state is one of the most fatal forms in which it can present itself. When the fever is high and fully developed, the danger is far less. Even so unfavorable, in my opinion, are any symptoms of congestion, that I always look upon it as a very bad sign,

when the patient, after the second hour, complains of being chilly and hot at the same time. Now, cold baths, in many cases, tend to prolong this congestion; or to produce a chill when the fever was about being developed; and in other cases, in which its administration is followed by quick reaction, the fever would have been sufficiently high without it. At any rate, it should only be used in the first days of the disease, for the obvious reasons, that it fatigues the patient to be often taken out of the bed; and in latter stage, it is inadmissible, on account of the prostration of the patient.

*Warm bath.*—Warm baths in congestive cases may be serviceable in promoting reaction; but when the fever runs high, and particularly if it be accompanied by ataxic symptoms, it does no good, but harm—the skin soon becomes hot and dry—the eyes and face flushed—and the pulse more bounding than before. In the latter days of the attack, its employment is improper, for obvious reasons.

*Cold affusions.*—I have used cold affusions in some violent congestive cases, with the hope of producing, by the sudden shock, a reaction, and full development of the fever; but, uniformly, without success. The patient, when put to bed and enveloped in blankets, had but slight reaction, and that of an ataxic character.

*Sponging and foot baths.*—By far the best mode of applying water, is by sponging the surface of the body, and by the frequent administration of hot mustard foot baths. The first should be applied to the head, throat, chest, and upper extremities—the temperature to be regulated by the condition of the patient. If his fever be burning hot, and he complains of heat, he will bear even ice water. Should he complain that the sponging produces chilliness, the water should be tepid or quite warm—a little vinegar mixed with the water promotes its evaporation. Ice applied to the head also gives great relief to the patient; but should it produce chilli-

ness, it is subject to the same objection as sponging with water.

The sponging keeps the skin moist—relieves to a great degree the sufferings of the patient, and moderates the burning heat of the surface. The foot baths tend to equalize the circulation, and to relieve the insufferable pains in the legs. The skin should never be permitted to become dry during the febrile action—and the foot baths should be frequently repeated.

*Emetics.*—In persons attacked immediately after meals, I have employed an emetic of pulv. ipecac. in order to relieve the stomach promptly of its contents; but have used them in no other way. In this way, I have seen it do no harm. Dr. Cartwright of Natchez has employed tart. antim. in doses from three to ten grains, given every one, two or three hours, dissolved in a little water, or, what he considers better, in the form of pills. It is only to be given in the first stage of the disease, and in cases of congestive or ataxic character. “Tartar emetic,” says Dr. C. “used in this state, restored sensibility to the torpid organs, produced secretion, and destroyed the ataxic character of the disease, by establishing a general and equable excitement; or, in other words, converted an irregular and intractable condition of the system into an open, plain, and manageable case of fever.” I have no experience in regard to this treatment, but think it well worthy the attention of the profession. The great objection to using tart. antim. is, it tends to increase the irritability of the stomach, so prominent a feature in this disease. But the supposition that inflammation exists in the stomach from the commencement, is a mere bugbear; and if, by the administration of any remedy, we can break up those fatal forms of congestion and ataxia we sometimes meet with, and produce an open, well developed fever, we should do so, even at the expense of increasing the irritability of the stomach. When the fever is fully formed, we can manage it—otherwise, not.

*Purgatives.*—The bowels should be evacuated as early as possible, and thoroughly. They, moreover, should never be permitted to remain unmoved over twenty-four hours; in other words, their own proper secretions should be removed. The best purgatives are of the milder kind; blue pill, or a little calomel, followed in a few hours by a dose of castor oil, and some mild saline laxative. Drastic cathartics do injury by irritating the intestinal mucous membrane. Costiveness is not a very common symptom in this disease, and, after the first evacuations, clysters are generally sufficient to keep the bowels open. The repetition of purgatives, after the bowels are well emptied, do no good, but often a great deal of harm. They seem to dispose the intestinal canal to sanguine engorgements, and consequently, to passive hæmorrhages.

*Narcotics.*—Opium and the salts of morphia are sometimes administered to check the incessant vomiting which supervenes in the beginning of the last stage; sometimes, also, they have been given to relieve the hiccough, and sometimes to quiet the patient in nervous delirium. In neither case have I ever seen good effects from their use. Without effecting the object aimed at, they appear to check at once the already too greatly diminished secretions.

*Blisters, &c.*—Applied to the epigastrium, blisters are sometimes of great service in relieving the gastric irritability in the commencement of the last stage. Their administration, however, requires caution, for if they are too large, or administered in improper cases, they do mischief by affecting the already exhausted nervous system.

*Stimulants*—Such as brandy, ale, port wine, carb. ammon. camphor, &c. are often resorted to towards the close of the attack, but generally in cases altogether hopeless. In many instances, however, I have thought that they did a great deal of good—the patients recovering under their use. The extreme prostration, to which the patients are generally reduced

after the febrile stage is gone by, demands some artificial support to be given to the system. The early administration of a little English ale, or sangaree of port wine, I have often thought has turned the scale of life in favor of the patient. But it must be remembered that yellow fever is not typhous fever, and that the like benefit from stimulants cannot be expected.

The remaining classes of the *materia medica*, such as tonics, diaphoretics, diuretics, &c. required no particular notice.

I have now concluded the task I undertook. In a future number I may offer some speculations concerning the etiology of this disease.

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### Foreign Correspondence.

For the Stethoscope.

PARIS, July 10, 1855.

MESSRS. EDITORS—If I mistake not, I gave your readers some intimations, in a letter addressed to you three months since, of a determination to inflict upon them a second communication. I proposé this evening to execute this threat.

It will not be denied, I imagine, that medicine pertains to the moral as well as to the physical and intellectual man; and in speaking of medicine in Paris and the life of a student here, the moral aspect of the subject will perhaps occupy a prominent place. What I propose to say may perhaps be arranged under the two simple questions of the advantages and disadvantages of medical study in Paris. I had thought of giving you some account also of several interesting medical and surgical cases, but time and proper regard for the patience of yourself and readers will perhaps forbid it.

#### I. Of the advantages.

The more I see of the hospitals and other facilities of me-

dical study in this city, the more am I satisfied of their superiority to those of other European cities with which I am acquainted. As most of your readers are aware, *specialities* are prosecuted here with the greatest industry and zeal, and with the inevitable result of decided "*progress*." It is next to impossible for any man, however gifted, to prosecute any branch of medicine with equal success and proficiency. The separation both in practice and study has grown somewhat out of the necessity of the case in most large cities.

In most of the great *general* hospitals here, there are some one or two surgeons and physicians, who are looked upon, and perhaps with propriety, as pre-eminent in some particular branch of medicine or surgery; and as a consequence, patients in many cases have an eye to this in entering the hospitals. Besides these immense hospitals, there are various private clinics, where specialities are attended to, and to which the medical student can resort. At some of these a small fee is required, but at others nothing is demanded.

After one has visited the numerous public hospitals here, he would think no city in the world half so well provided for the proper care of the sick as Paris; that all had been done to meet the *largest* possible necessities of the case. In this latter conclusion, however, he would err greatly.

It is surprising to see the number of patients at some of these private clinics. At Desmarre's, (the eye man,) there are thirty new cases every day. He has three clinics a week, and it requires three or four apartments to contain the patients. It is impossible, with all his despatch, to dispose of them. His practice here is gratuitous, and I have no doubt, by the way, that the profession in Paris is greatly though not designedly injured by this extensive system of gratuitous advice, or the *abuse* of it, rather. I had been told, that to be admitted to the hospitals, foreign students required their diplomas, and had also to pay a small fee. In no hospital that I know of is either strictly required.

I attended hotel Dieu two months before asking for a card of admission. Here they required my diploma, but asked no

fee whatever. The same thorough republican liberality is met with at the school of medicine, where lectures are regularly delivered throughout the year. The law schools are as free as the medical. Besides these general hospitals and private clinics, the system of private instruction is exceedingly valuable to foreigners. These are tolerably expensive, and hence are not enjoyed but rarely by others than the English and Americans. This is the very best clinical instruction that one can acquire. The classes are very small, numbering from two to six—generally only four—and hence each student has the opportunity of examining the patient with considerable care, and to make his diagnosis. After this is done, the instructor, who is usually very competent, either corrects or confirms the diagnosis, treatment, &c.

Nothing has pleased me so much as the wonderful power of diagnosis of these French surgeons and physicians, although I had some knowledge of their skill in this respect before coming here. They seem to understand a man as well as a clockmaker does the instrument, all the pieces of which he can subject to the examination of the eye and touch. Diagnosis is looked upon as absolutely essential to the very beginning of treatment, and little or nothing is done until it is most clearly ascertained *what is the matter*. This is certainly building upon the right foundation. I have been sometimes amused at the almost ridiculous length to which they carry their investigation. If a man has a common sore upon the finger, they ask him fifty questions, and often examine him from head to foot, besides tracing his genealogy back through several generations. Not satisfied with this, they often enquire with care how many tissues are involved, &c. &c.

After Talliex has examined a patient, you know his parents, trade, age, everything about his food and drink, the number of meals a day, and in a word, every item of the man's in-door and out-door life.

While these examinations may sometimes be carried unnecessarily far, yet you will readily perceive that they furnish a most admirable school for the medical student. It is an ex-

ceedingly difficult thing to know how rightly to interrogate a patient; and I am satisfied that many a physician, of years' experience, has made most egregious mistakes from want of skill or patience, or both, in this matter. The fact is that the task is more difficult than the examination of a witness in a court of justice, for which not every good lawyer is remarkable. Talliex is so thoroughly systematic, that it is almost impossible for him to err—i. e. he will scarcely ever make a wrong diagnosis. He may make none at all for the time being. He never permits the patient to *talk*. The replies to his questions are either a simple "yes" or "no"—no comment or explanation. By this mode he is never diverted from his track. These examinations often require a half hour—sometimes more. He first makes one of the extunes examine the newly arrived patient, give the diagnosis, treatment and prognosis. He then goes through the examination himself, and criticizes that of the extune.\* These, then, in few words, are the chief medical advantages of Paris. The love for specialties and their consequent happy results, the perfect freedom of the hospitals and medical schools and the system of instruction.

Another advantage which I may mention, although not medical, but nevertheless important, is the cheapness of living in Paris. This is not due to the cheapness of food here, but it is owing to the manner of living. If a man in New York or Richmond would be content with the number of dishes with which he is satisfied here, he could live cheaper in either of those cities. Those persons in our country who live in third rate boarding-houses, live much better than most students live

\* Since writing the above, I regret exceedingly to inform you that this able and accomplished man has died. I followed him through his wards three days before his death, and thought he would most probably outlive most of his compeers. I do not think I ever knew a man possessed of a better constitution apparently. He was forty-eight years old, about five feet six inches high, and remarkably stout and muscular. He died on the 13th instant of a sort of diphtherite, or violent inflammation of the pharynx. There is no American student in Paris, I am sure, who does not most deeply regret the loss of this great man. A friend of mine was so much delighted with him that he thought of taking rooms in the neighborhood of La Pitié, as much out of the way as it is, and to follow no other man but Talliex. He has published, as you know, a large and valuable work, a copy of which I doubt not every American student will take home with him.

here—i. e. they have more meals in the twenty-four hours, and a much greater variety of food. But the French have, as you know, such a nice way of serving up their viands, &c. that a man rises from dinner with an impression that he has had a sumptuous entertainment, when in fact the whole did not cost the proprietor of the restaurant more than twenty or twenty-five sous.

II. I now come to speak of the disadvantages of Paris to a medical student.

There are some features of this subject which I would, if I could conscientiously, dismiss in a most summary manner. I write not to condemn any who are here, but simply to give to those who may contemplate sending their sons to this city, a view of the other side of the picture, and a plain statement of the dangers to which they will be exposed. The first objection which I will mention, as applying to Paris, is the time allowed to visit the hospitals. In London, and I believe in Edinburg, and perhaps in all the other cities of Europe, the physicians make their visit from 12 to 2 o'clock, whereas here it is made at 8 o'clock in the morning. To attend these hospitals, it is necessary to rise at 7; and at this hour in the winter it is quite dark. Some of them are two or three miles distant from the quarter inhabited by students. It is not therefore to be expected that those young men from the United States, who at home during the winter rise at 9 o'clock, will, when in Paris and left to do just as they please, suddenly change or break through a well established and often a most inveterate habit, and rise by light without fire, and walk from one to two or three miles through the cold. In the summer, it is light here at 3 o'clock, but unfortunately, for the student at least, the afternoons are so long, (one can read without a light till 9,) that he rarely retires before 11 or 12, and, with the well known enervation and indisposition to exertion resulting from warm weather, he is not much more inclined to rise at 7, and take the long walk upon an empty stomach, than in the winter season. If it would serve any good purpose to enter into a more minute examination of this

subject, and especially to deal in figures, I think there would be little difficulty in *demonstrating* the argument.

Besides, all the hospitals, as you may know, are open at the same hour, and you can visit but one a day. If you are not up early, the opportunity is gone. This, then, is one objection to medical instruction here, that but few fully enjoy the hospital advantages. The second objection to Paris is, that taking all things together, (I allude to the practice of medicine in all its aspects,) I think a young man is not so apt to be made as good a physician here as he would be made, with equal diligence, in London, Edinburg or Dublin, especially if he has had no experience in practice, or has not enjoyed the advantage of hospital practice at home or in England. I would not express this opinion, for fear of a want of a proper knowledge of this subject, but I have had some opportunities of knowing the mode and success of practice as pursued in England and especially in America, and moreover I have heard the same opinion expressed by others better qualified than myself to judge rightly in the premises, and I think I am warranted in saying that we cure our patients in the United States more *speedily* than they do here. How many we *fail* to cure that the physicians here would cure, I am not prepared to say. I have seen cases treated here which are exceedingly simple and well known among us, that we would cure in one-third of the time required here. In cases of simple functional derangement, which a little assistance from medicine would relieve in a day or two, the patient is put to bed, takes a warm bath, perhaps a vomit, and is put on light diet, and finally gets well, but 'tis doubtful whether he has been cured. The physician has stood by and permitted nature to work the cure. I have seen enough of practice to know the value I hope, at least to some extent, of this *vis medicatrix naturæ*; and I know also the disfavor with which "meddlesome" medicine is viewed by the best medical men of all countries; but there is nevertheless a middle and a better way. There is a manifest difference between *no* help at all and a judicious and cautious assistance; and in three-fourths of

the cases treated, the skillful physician can, I think, afford this assistance.

One reason, perhaps, why the French *surgeons*, especially, proceed with such caution in their operations, and defer them so long, (they really make *noble* efforts to save a limb,) is that their operations turn out very badly, not because they are badly done, but because of the situation and diathesis of most of their patients. There is something, as is well known, about large hospitals, which is unfavorable to recovery from operations. I have seen patients die here who would have perfectly recovered in our country in ten days after the cutting. I saw one case last winter, in which a man lost his life by the indisposition of the surgeon to take off the arm. When the operation was performed it was too late.

Another objection to Paris is the language. Unless one has made considerable progress before coming here, it will require at least three months of most diligent application to study anything medical with advantage, except perhaps surgery, which he can see and understand without the aid of his ears. This difficulty is a full offset, I think, to the greater cheapness of living here. Three or four months of one's time is almost lost, which in England would be well employed.

The last disadvantage which I shall mention, and to which I have already alluded, is to my mind by far the most weighty. I refer to the immoral influences to which a young man is subjected. There are some parents, unfortunately, who attach but little importance to this subject; but there are others, I am sure, who think very differently. There seems to be but one opinion among all persons with whom I have conversed upon the subject, to wit: that Paris is more destructive of all the better habits, as we in America consider them, than any city in Europe. I have certainly never seen anything to compare with it. If it were proposed to an intelligent father in the United States to send his son to Norveau to reside for two years, he would look upon the man making the proposition simply as a fool, whatever might be the advantages promised. I do not profess to have ever been among these detestable

libertines myself, but from what I have read of them, they can be very little worse than the Parisians. Concubinage is enjoyed here to any extent and without disgrace. There are multitudes of men and women who live in open adultery in the most respectable boarding-houses. The common women dine in all the restaurants side by side with ladies, and of course in company with young men. They also sit side by side in the public gardens and theatres. These places of amusement, besides numberless *public* balls, are open every night. A young man can't go into a café without meeting with them; and if he gives one the least encouragement, she does not hesitate to speak to him. When to these temptations, occurring *every day*, you add the entire removal of all the restraints of public sentiment, it will not be difficult to predict the course which most young men will pursue; and I think it may be safely said that to associate with these miserable hirelings is to destroy sooner or later those higher moral feelings and that deference for the other sex, which is so characteristic of the refined gentleman.

The Sabbath day is never spent at church, of course. The miserable wretches with whom he associates have no regard for the Sabbath day. To them it is a day of excessive dissipation, ending generally in a drunken revel at a ball. Men may talk of the admiration of virtue by *contrast* with vice as much as they please, but in this connection it is simply nonsense. "Evil communications corrupt good manners." This wise maxim needs no defense; and when these "evil communications" exist for months and years, and are at work day by day, that man must be a curious creature indeed who remains insensible to them. The fear may well be excited that by this protracted exposure the moral sense must receive a shock from which it never recovers. As has been sometimes observed, the subject of these deadly influences goes home a libertine and an infidel—the latter the natural consequence of the former.

A gentleman once enquired of a friend, whom he had heard was about to remove to a certain city in the United States,

whether or not he had any sons ; and it being answered in the affirmative, he advised him to "cut off their heads" before removal. If a sensible man entertained such an opinion of the evil influences of a city life in our country, what may not be held in regard to their tendencies here? After considerable enquiry and no small opportunities of acquainting myself with the subject, I am satisfied that this is one of the most, if not *the most* sensual and thoroughly seductive city of either *ancient* or modern times. There are attractions and a combination of evil influences about Paris, many of which were unknown to the ancients. As high as the flood gates are lifted, and as strong and overwhelming as is the current, there are some young men, however, who swim out safe and sound. Like the hapless children thrown into the Ganges, but who reach the shore alive, they must be, as you may well imagine, possessed of almost *unnatural* vigor.

Another objection to this city of a somewhat kindred nature, is the excessively lazy habits of its inhabitants. There is more time absolutely wasted here in one day than is thrown away in New York in a fortnight. Though I have been here some time, I am still amazed to see men waste hour after hour, as if time were the cheapest and most worthless thing imaginable. A French gentleman informed me, that if a young man's father were wealthy, the son rarely dreamed of a profession, or any occupation whatever. His sole object was to spend his life in cafés, restaurants, balls and operas.

Idleness, as you know, is contagious ; and when one sees everybody idle about him, he soon feels inclined to become idle himself. The French have no *inner, higher* life. Their great aim seems to be this—to be able to do nothing, to eat and drink and be merry. When they work they do it with all their might, in order that they may be the sooner idle.

To these unmanly features those across the channel, who speak our language, present a most striking contrast ; and I now see that the contempt which the English feel towards the French is not altogether founded upon national jealousy. The two nations are separated, morally, as far as the poles.

But in concluding, let me say to fathers, who will have their sons educated in Paris, to be sure when they come, to come with them. If this be impossible, let the son remain at home until his habits are thoroughly fixed and settled, and fortified by the strongest moral principles.

Yours truly,  
P.

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### EDITORIAL.

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#### **Apothecaries and Quack Medicines.**

To the Editors of the Stethoscope.

CHARLOTTE Co. Va. Aug. 3, 1855.

GENTLEMEN—Having been acquainted with Samuel C. Sheppard, 107 South Ninth street, Philadelphia, for a number of years, and recognizing in him a man of sterling worth, as the champion of medical reform in his department of business, we propose to introduce him to the favorable consideration of the members of our profession. So far as our intercourse has extended with him, fidelity in moneyed transactions, in supplying his customers with the purest drugs, neatly put up, keeping them posted up on “new remedies,” hostility to quackery, (a class of medicines which he has long since discarded from his shelves,) are traits in his character which he has adhered to with uncompromising tenacity.

If there be anything here worthy of good report, please give it an insertion in your journal, with the request that it be copied in other journals having for their object the advancement of science—and that merit may have its reward, we think, as another has said, that “Samuel C. Sheppard is justly entitled to the patronage of the whole medical fraternity.”

Respectfully,

A. & B.

WE received the foregoing communication from an esteemed correspondent. Doubtless Mr. Sheppard is as worthy of commendation and the confidence bespoken, as his example is worthy of imitation.

With regard to the sale of quack medicines: We take leave to say that our national medical organization (if we mistake not) has pretty fully embodied its views of the reciprocal obligation of practitioners of medicine and venders of medicinal agents, in the national code of ethics. Our state society has also had the same subject under consideration, always, we believe, with divided counsels.

In our intercourse with the druggists of this city, we take pleasure in stating that we have found many of them possessed of sound views, and disposed to liberal and just practices on these premises. But there seems to be an insuperable difficulty in the way. We are assured that large orders are continually sent to this city for patent medicines, and that too, by men regularly inducted into the profession—invested with its honors, and certified by the schools of medicine as worthy of public confidence, and equal to the onerous responsibility of the calling.

“ ’Tis true, and pity ’tis ’tis true.”

It cannot be expected, then, that druggists should take the lead in protecting the public against the nostrums of quacks. The medical profession must first purge its own body. If practitioners of medicine, regularly graduated and diplomated, dispense or in any manner sanction the use of these vile compounds, the ever gullible public will be clamorous for their consumption.

We would suggest to our respected correspondents, that there is a more promising method of attaining their ends, and a more imperative duty resting upon such members of the profession as desire to maintain its respectability and usefulness, than entering the lists with the thousand and one species of charlatanism now so rampant in this country.

No reflecting and intelligent mind can fail to trace all these

evils to their true sources, in the facility with which admission is gained to the ranks of the profession, and the hurried, imperfect systems of instruction, and the low standards of qualification exacted of candidates for the doctorate.

Too many of our schools of medicine are joint stock enterprises—managed, from the matriculation fee to the exorbitant demand (*in money*) for the sheep-skin, with reference to *the dividends*.

We have recently conversed with a *brother practitioner*, who, just about twelve months ago, commenced the study of medicine. In July last he received his diploma. In giving an account of the method by which he was so expeditiously “put through,” he said he “did’nt mind the examinations at all, but paying thirty dollars for the *thing* was the d—l.”

The school which conferred this diploma, is represented on the floor of our national association—a body whose “original and grand finality” *was* designed to consist in a *reform* in medical education.

Again—we say to our readers, look to our own ranks, and to the manner in which they are recruited, before you wage war against the knights of the mortar and pestle. The evils inflicted by the whole army of outside quacks and tribe of middle ground *pathies*, when compared with those reveling in our own avarice-cankered systems, are but as the dust in the balance.

We think there is much wisdom in the sentiments of the following extract from the address of the president of the Alabama medical association :

“Of the gigantic strides of modern charlatanism, Dr. Anderson speaks fearlessly :

“‘The subject of disqualification for fellowship with us leads naturally to that of quackery and empiricism, some allusion to which seems almost indispensable on occasions like the present. Our association has done wisely in having nothing to do with those who soil their garments with quackery ; and I am persuaded that to ‘*let it alone very severely,*’ is the best

course for us all to pursue with the foul thing. We but give it the notoriety it craves, and thrives upon, by any direct and public attacks upon it. To reason with the illiterate is confessedly vain, and experience shows that education and intelligence do not guard men against its delusions. It is among the so called intelligent classes, that the various pathies find their support, while the ignorant are the equally willing victims of less pretentious impositions. Unless men could be taught common sense, led to reflect how stupid it is to reject as worthless the labors of all the bright and pure minds that for over two thousand years have toiled to discover the cause and cure of disease—each taking as a starting point the spot his predecessors had reached—and in place of their conclusions to adopt the misty theory of some shallow sciolist, or the crude notions of some illiterate quack, we cannot cure mankind of their proclivity to empiricism.

“ ‘ Taking men as we find them, the few only are capable of judging of the merits of any system of practice, or of him who dispenses it. They indeed steadily adhere to what they feel to be right, but like the true physician, make but little noise about it. But the multitude with capacious gorge, are ever ready, physically and mentally, to swallow anything, however monstrous, and if they escape alive, to utter loud hosannas to what fails to kill them. The charlatan fails not more loudly to echo them back, and with big words, lying certificates, taking pictures, and every device the wit of those who are too lazy to work can suggest, ever draws fresh victims in his net. He is backed by the noisy many, the intelligent physician by the quiet few. How worse than useless then to enter the lists with such antagonists and before such judges. No! Let the true votary of science go on the even tenor of his way, satisfied to do his duty to himself, his profession and his fellow men, assiduously studying out the hidden sources of disease, and ransacking the arcana of nature for their remedy, assured that ‘ truth is mighty and will prevail,’ and that he owes it to the cause of truth not to falter in its investigation; to its dignity, not to provoke a contest with mean assailants;

and to its public estimation, not to bring it to trial before a prejudiced and incompetent tribunal.

“ ‘ Be it ours, therefore, in our treatment of quackery, to let alone—to touch not, handle not, regard not the unclean thing ; to eschew it not only in its vulgar and flagrant forms, but ‘very severely’ also in its secret manifestations—scorning to increase our emoluments by pandering to the diseased imaginations of those who would gladly be imposed upon by a mixture of its delusions with an authorized system—avoiding religiously all encroachments on the just rights of our brethren ; depreciating them never, by word or deed, gesture or grievence, but sustaining them by commendation when due, and avoiding censure for errors we may know they did not willingly commit—in short, following ever and to its utmost extent the infallible precept, so worthy of its divine author, of ‘doing to others as we would have them do unto us.’

“ ‘ But I would fain quit so ungrateful a theme. It has been said by high authority that there is as much quackery in the medical profession as out of it, and with so much less excuse, that the illiterate empiric may be self-deceived—the professional one cannot be. But the sweeping assertion is not to be credited. I hope that compared with true merit, quackery is a mere mote in the professional eye, but the mote is still an obstacle in our clear vision, and ought to be removed. This done, we may then consider whether the beam that is in the eye of empiricism, and the great public eye, may be best cast out by direct effort, or by striving to render the merits of the profession so clear that the beam may of itself fall out, by making our light so shine before men, that they may see our good works, and gladly receive us as their ‘guides, philosophers and friends.’ ”

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SELECTED ARTICLES.

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ON THE REPUTED CAUSES OF YELLOW FEVER, AND THE SO CALLED SANITARY MEASURES OF THE DAY—By M. Morton Dowler, M. D. of New Orleans.

I propose, in the present communication, to offer a few reflections on the notions, etiological and preventive, that to a great extent prevail here touching the subject of yellow fever. In proceeding to do so, I shall offer a few remarks appreciative of the filth theory, as deducible from the condition of things in and about Gormley's basin and canal, during the epidemic of 1853. I may say, once for all, at the outset, that I am no advocate of filth, nor for any government or individual who is. Filth can never be salutary, but the reverse, when it has any effect at all. It is not only clearly noxious to the *physique* of our species, but it offends our moral sense. It sustains the same relation to the body that we are assured sin does to the soul; and as body and soul mutually react on each other, so do sin and filth intermingle, and, as it were, become confounded with each other. The wages of filth, as well as the wages of sin, should be by every possible means avoided by "a reform council." But, filth though bad, is neither a basilisk nor a gorgon's head; nor is it the cause of yellow fever. Sanitarian philosophers in our midst appear to regard it as all of these. The physician who looks beyond the hold of a ship, or who raises his thoughts above the contents of the gutter, is regarded by many as incapable of discerning the *punctum saliens* of all epidemics. The ship hold and gutter philosophers desire to claim sway; and in their crusade against filth, on the yellow fever basis, go for expending millions of the public money, and devouring the commerce of New Orleans. But *revenons à nos moutons*. All are familiar with that remarkable caldron, the Gormley basin and canal. The basin occupies the large square bounded by Felicity road, Dryades, St. Andrew and Hercules streets; and the canal, which is about eighty feet wide, leads from the basin towards the swamp, for a quarter of a mile, and there, at Ellen street, suddenly terminates in a ditch two feet wide. The canal and basin were originally about ten feet deep, but during

the last eighteen years they have constantly been receiving the discharges from St. Andrew street and from Felicity road, and from all the streets that enter into the latter at an acute angle. None of the deposits ever having been removed from the basin and canal, they have gradually filled up, till within the last three or four years the dregs of the whole area have begun to show themselves above the surface of the water. After a heavy rain the basin has about four inches of water in the centre, with just sufficient depth to cover the two deltas formed at the *embouchures* of the gutter of St. Andrew street and Felicity road. This enormous area, from which no filth ever yet made its escape, has no other outlet than the narrow ditch in which the canal terminates, and at every point within the area a pole can be thrust down seven or eight feet, piercing, at the same time, thrice the number of kindred ingredients to those enumerated in the Wierd Sisters' catalogue. For all we know, indeed, it may contain some of the "grease that sweeten from the murderer's gibbet," for it was formerly the site of the gallows. The appearance of the hot sun, after a rain, speedily covers the caldron with a deep green mantle, which a few hours of solar action converts into an elevated black foam. As the evaporation goes on, nearly the whole space becomes uncovered, the basin yields up its dead, and the whole necropolis of departed animal and vegetable life lies naked to the rays of the sun. To crown all, the whole district is occupied by a series of soap factories and tanneries, which no precaution can prevent from exhaling an offensive odor, as stale animal matter is here the material operated upon.

If there be a word of truth in the "filth theory," would not the yellow demon have naturally erected his throne on the vapors of the Gormley canal, and after having smitten all in the immediate vicinity, have carried the war into other districts? Such, however, was not the case. The wayward disease did, it is true, early make its appearance at "the caldron," rapidly carrying off one Kehm and his wife, the former dying with the black vomit. There appears to be a discrepancy with regard to the dates of these cases. My own recollection fixes them early in May. The sanitary commission, who have "sent for persons and papers," have fixed the cases about the first of June. The discrepancy is, however, quite immaterial as affecting the conclusions which I have drawn from these cases, namely: 1. That they were amongst the earliest, if not the very first cases, that occurred. 2. That they not only clearly occurred without any communication with the shipping, but that they made their appearance, and

terminated fatally many days before it has been pretended that there was any case on board of any ship that came into the port of New Orleans. 3. That Kehm and wife could not have contracted the disease by personal contagion, as they had not been in contact with any person laboring under yellow fever. 4. That Kehm and wife did not communicate the disease to any person, though immediately surrounded by unacclimated persons; for no person in the neighborhood was attacked for six weeks after the time of Kehm's wife's death, following the date given by the sanitary commission; and after the expiration of that time no less than fifteen persons were attacked in the same square almost at the same time.

Now, we would ask the filth theorists, how came it to pass that the disease abandoned the shores of the Gormley canal and basin for six weeks, in which the hot month of July was included, and betook itself to the front of the fourth district, attacking squares which were but sparsely populated, free from stagnant water, and comparatively free from filth? From the beginning to the end of the epidemic I was in the midst of it, and I can positively affirm that the disease showed no special predilection for localities having a concurrent excess of heat, moisture, and animal and vegetable putrefaction—the driest, most elevated squares, the cleanest streets, houses and yards, being alike, and simultaneously, invaded with places in which the reverse prevailed. The early appearance of the two yellow fever cases at the canal and basin, and the disappearance of the disease from these places for six weeks, while it ravages the front of the fourth district, shows conclusively that the “ingredients of our caldron” did not in the least affect the health of the neighborhood, but that the disease actually ran away from the most awful repository of filth in the corporate limits of New Orleans, and that it is probably a matter of supreme indifference, so far as yellow fever is concerned, whether the rear of the fourth district be girt with the piney woods of Biloxi, the bluff of Natchez, the sand hills of Vera Cruz, the rocks of Havana, or the seething canals and basins that “boil and bubble” in the rear of the Crescent city. In fact, the filth theory is wholly untenable, not only from the entire history of yellow fever in this community, but from every analogy known to science. Every product, whether solid, fluid, or aeriform, or imponderable, whether resulting from the decomposition of animal, vegetable or mineral matter, produces effects which are remarkably uniform. They do not discriminate between the acclimated and unacclimated, nor are they noxious or innocuous properties at all modified by such circumstances. For instance, the deposits at Gorm-

ley's basin give off, amongst other substances, sulphuretted, carburetted and phosphuretted hydrogen, and ammoniacal gases, substances which, with ordinary ventilation, merely give evidence of their existence by offending the nostrils, in bad ventilation become oppressive, and when highly concentrated, quickly destroy life. The effects are uniform in all climates; and to assume that the mere inhaling of a mixed atmosphere, which one person breathes with perfect impunity, should give another the yellow fever, another the cholera, and a third the typhous fever, is simply a *reductio ad absurdum*. Our knowledge of these gases demonstrates that the reputed cause is insufficient to produce the effect, and there is not a shadow of proof to show that it does produce it. The exhalation from departed animal and vegetable life mingle with our every breath, and it has never been shown nor ever can be shown that they act otherwise than uniformly.

Touching the fifth question, let us not be misunderstood. Let every alderman "search the scriptures." There is scarcely a chapter in that sacred book which does not admonish all to "wash and be clean." Common decency also speaks aloud. False and improbable theories, however, can do nothing else than lead to useless and extravagant and corrupt legislation, and to lull the public into a false security.

The distinguished Professor Riddell of the University of Louisiana has adopted the atmospheric theory of yellow fever, which he deduces mainly from the fifth platform. His views are liable to all the objections which we have urged, besides others peculiar to themselves. He holds the following language:

"That the disease has been marked by characters of infection, and infectious communicability, the poisonous matter (doubtless some species of living organism) maturing its germs or spores on the surface of solids devoid of life, surrounded by impure air; which germs become diffused in the impure atmosphere.

"Three peculiar conditions seem to favor the development of the infection. 1. The absence of ozone, the great chemical promoter of oxidation, which absence permits the undue development of obscure cryptogamic life. 2. Abundant emanations from decomposing and disintegrating organized matters, complex products, gaseous, liquid and solid, the pabulum or blastema of cryptogamic growths. 3. The presence of the specific organism, whose perfected spores constitute the material cause of yellow fever."

The cryptogamic origin of yellow fever is untenable, for two reasons: In the first place, it is denied that such crypto-

gamia are known to exist, although Professor Riddell appears to have no doubt on the subject; and in the second place, whatever forms "of obscure cryptogamic life" may be discovered to exist, all analogy shows that they cannot be admitted as the cause of yellow fever no more than the gases of which we have spoken; for all the poisonous fungi or cryptogamia must be admitted to act pretty uniformly, and to injure all persons alike who are subjected to them. Acclimation could no more render a poisonous fungus innocuous than it could render a poisonous mineral so. Professor Riddell's poisonous cryptogamia contravenes all toxicology, which teaches us that all animal, vegetable or mineral poisons not only affect those who never have before been affected by them, but that they will act equally a second, a third, or a twentieth time.

We need not follow the learned professor in relation to his views of ozone. The condition of the atmosphere in regard to that shadowy agent, whether plus or minus, does not appear to have any effect in the production of the ordinary cryptogamia of the botanists, and why on "the obscure forms of cryptogamic life?" Did ozone exist in such quantity in the atmosphere as to prevent the development of *any* form of either vegetable or animal life, including "the obscure forms" of Professor Riddell, can it be otherwise than probable, nay certain, that the whole population would be thereby asphyxiated? Professor Schonbein, who first described ozone, says that its effects on the lungs are similar to those of chlorine and bromine; that a mouse was killed by it in five minutes, and that he himself was seriously affected by breathing an atmosphere charged with it. Neither Berzelius nor Schonbein were able to say positively what ozone is.

According to Professor Riddell's hypothesis, there was an absence of ozone in the atmosphere of New Orleans, and of course at Gormley's canal and basin, and, also according to the same, of course in the latter locality an abundance of the "pabulum or blastema of cryptogamic growths," as there was no lack of "emanations from decomposing and disintegrating organized matters, complex products, gaseous, liquid and solid;" and yet, the disease showed no preference for the locality, first appearing and then leaving it for many weeks. Waiving all opposition to Professor Riddell's gratuitous and imaginary premises, and supposing he had actually discovered the nonozonic state of the atmosphere, and that it was charged with myriads of *fungi venenati*, he would not have thereby made the first step toward elucidating the etiology of yellow fever.

As was to be expected, the disease reappeared at the Gormley canal, but it was not till about the first of August. And here it will naturally be asked whether or not all the nonozonic, cryptogamic and filth agencies—the latter needing neither retort nor microscope to prove their existence—tended to increase the number of cases or render them more malignant when they occurred: or whether the patients would have fared any better in the hill side towns and piney woods where the disease prevailed? The number attacked by yellow fever in 1853 in New Orleans, could not have been less than 27,000, and the number of deaths were probably from the same cause not less than 9,000, making a mortality of thirty-three and one-third per cent. of those who suffered. Here is a picture truly frightful to contemplate, but it bears no comparison to the ratio of mortality that occurred in most of the country towns, villages and plantations, many of them dry, elevated, and free from filth agencies. In many of these localities nearly the whole population was attacked, and death occurred at a ratio that would have carried off our whole unacclimated population in less than forty days!

Comparatively speaking, New Orleans was but lightly scourged, but she lost one in three of those attacked as a general result. As might naturally be expected, some portions of the city exhibited a higher and some a lower ratio of mortality, and according to my observation, which was very extensive, though the disease attacked at the Gormley canal, as it did throughout the city nearly all of the unacclimated, it was far less malignant there than in any other portion of that suffering region, the fourth district of New Orleans, excepting around the Saraparu market. On examining my records, I find that I attended forty-seven patients immediately on the basin and canal, the most of them residing in soap factories, nine of them being children under ten years of age—the other thirty-eight were of various ages—twenty-seven males and eleven females. The women and children all recovered. Four of the males died. One a young man, aged about twenty-four years, who died in Ellen street, was apparently doing well till he was taken one night to the upper story of the soap factory—and I believe his death resulted from the heated air that arose from the furnaces rather than the intensity of the disease. Another was a young man of about the same age, who was removed from Ellen street to Magazine street, where he died of black vomit. A third was aged sixty, and was affected with tuberculosis of the lungs. A fourth, aged thirty-five, relapsed after going out to work, and died with black vomit. The forty-three who recovered

were mostly mild and manageable cases. In the square occupied by Mr. Ebinger's soap factory and residence, which is bounded on one side by the Gormley canal, and on another side by the Gormley basin, and which receives the whole venom of the caldron, there were fifteen cases—occurring, however, after the third day of August. I attended on twelve of these cases. All fifteen recovered. There was not a death on the square around which exists more filth—more of the “pabulum” of which Professor Riddell speaks, than can be found in any square in New Orleans, and where, according to the filth theory, the maximum of mortality ought to have been found.

As for the treatment pursued, whatever may be its merits, one of the most important elements of the success in these cases was the mild type of the fever; for, in pursuing the same general course in certain other quarters of the city, no such result could be obtained. I attended thirty-five cases in the squares around the Saraparu market without losing a case—one of these, too, being a case of black vomit—whilst in the neighborhood of Washington street, in one house, three were attacked and two died; in another, five were attacked and three died; in another, three were attacked and two died. To show that the disease was malignant, without any discernible local cause, in the house in which the three out of five died, no less than six persons were attacked in the adjoining house, and every one recovered. I found but little difficulty with children. Some were attacked with convulsions, but rarely. In them the disease was so mild that in many cases I found the *vis medicatrix naturæ* altogether trustworthy, yet all toxicology shows that children are fearfully sensitive to all poisons, including the cryptogamic and gaseous. “Doubtless,” says Professor Riddell, “the poisonous matter” is “some form of living organism.” I should say that doubtless the professor is mistaken, for if the disease has such origin, it would not be so merciful to children. Immersed in a common atmosphere, in a common room, the stalwart father falls mortally poisoned, while the tender infant is affected with a mild fever, which in a few hours spontaneously goes off in a perspiration. Strange fungi! strange gases! strange poisons! A strange foundation have the advocates of these theories! A strange pretense for all the extravagant systems of disinfection, quarantines, and Quixotic schemes of drainage! Professor Riddell gravely proposes to restore the atmosphere to its wonted quantum of ozone!

Touching the great epidemic of 1853, Professor Riddell comes deliberately to the conclusions “that the towns and

plantations of the southwest have *this year* derived their yellow fevers from New Orleans;" and, further, "that although black vomit fever, or types of yellow fever, *may perhaps originate in this region*, yet, the *germs* of our epidemic of 1853 have probably been derived from countries further south." The "germs" alluded to are, according to the professor, the "specific organism, whose perfected spores constitute the material cause of yellow fever." If no further evil could result from the above than the mere enunciation of purely speculative ideas, on the part of the able professor, we should have no demurrer to enter in the premises. But, when all the evils of expensive, ruinous and oppressive legislation are sought to be saddled on the people, under no better pretense than the groundless dogmas here put forth, the case is different. The professor is a member of a learned and salaried commission, who are sitting in judgment on the causes and prevention of yellow fever; in the employment of the city government. The opinions and theories put forth should be worth paying for, and worthy of being a guide to legislation. The public will hold him emphatically to the proof of what he has set forth in his official report, published by authority of the state. For example, at what time, place, and under what circumstances, and before what witnesses were cryptogamic bodies discovered, "whose perfected spores" Professor Riddell categorically deduces to be the "material cause of yellow fever?" Were they (if they exist) more numerous last summer than the summer of 1852? What were the circumstances of time, place, witnesses and reagents, that led to the nonozonic revelation?

If these views of the professor be correct, then why is not he consistent with himself, and instead of saying "that it is proper and feasible for New Orleans to have *some kind of quarantine*," why did he not recommend, in the name of common humanity, the most rigid and uncompromising system of restriction? "Some kind of quarantine," indeed! Alas! if it be true, as he suggests, that the great epidemic was freighted into New Orleans, what can excuse the lukewarmness here exhibited in relation to quarantine? Would any commercial or pecuniary sacrifice be too great to save 27,000 persons from the bed of suffering and 9,000 from the bed of death? And if it be true that the pestilence was freighted out of our city to ravage six states of the Union, what sacrifices ought we not to be willing to make to prevent our city, if possible, from being the scourge of the south! According to Dr. Riddell's etiology, we ought to stop at nothing, even to the absolute interdiction of the Mississippi, when the yellow

fever makes its appearance in New Orleans. No ordinary quarantine could be trusted. Of what avail is it that yonder ship has passed the ordinary quarantine, and no cases of yellow fever have occurred, and she is pronounced clean? Who can say that she may not contain, at the same time, "perfected spores" of millions of the Riddellian cryptogamia?

Now, we deny that importation played any part in creating the epidemic of 1853; and we are prepared to prove that the causes of yellow fever, whatever they may be, had produced the terrible black vomit case of Kehm, and also the case of his wife, independently of anything "further south." It is easy, throughout the country, to designate scores of instances in which the disease appeared without any possibility of its having had its origin either directly or indirectly in New Orleans. We further maintain that clear and unequivocal proof of isolation and independence of origin, in a single case of yellow fever, is evidence of more value in determining the question of importation and exportation, than all the coincidences, successions of events and consequences that Professor Riddell has elicited from his extensive correspondence throughout the country, ten times told.

In order to have carried the disease from New Orleans and to have rendered it epidemic throughout the great southwest, and at the same time to reconcile the whole with his etiology, an impossible prodigy must have been performed, and Professor Riddell's "three peculiar" [atmospherical] "conditions, which seem to favor the development of the infection," must also have been shipped on board of the steamers, and carried along with the fugitive patients! The nonozonic, the miasmatic and the cryptogamic conditions of the New Orleans atmosphere must have been freighted on the same boats with the flying people. No one can abandon this ludicrous position, and adhere to the professor's etiology, without abandoning the whole allegation, unjustly charged against New Orleans, that she created an epidemic in six states of the Union. If the New Orleans atmosphere was not shipped into the country, the three conditions must have existed in the country at the time of or before the shipping of the yellow fever patients, and consequently the allegation falls to the ground; and if, as Professor Riddell admits, and as all ought to know, "the disease has not been personally contagious," to what other conclusion can even he arrive, than that the great epidemic could have extended itself in no manner inconsistent with entire independence of its doings in New Orleans?

The disease might have been carried into New Orleans and carried out of it; but it could not have become epidemic from

anything that could be carried in or out, even on Professor R.'s etiological conclusions. The disease of 1853 was in no respect different from the disease which has occurred here every summer, either in the epidemic or sporadic form, for the last twenty-five years; and during the epidemics of 1837, '39, '41, '43, '45 and '47, had it been possible for New Orleans to have originated a southwestern epidemic, it would have made its appearance. The unknown conditions, however, which produce the disease were present in New Orleans and absent from the country; and hence, all the power of steam in wafting away goods, patients, bed and bedding, could not confer an epidemic on any plantation, town or city, any more than could absolute nonintercourse have prevented the general epidemic of 1853. The mere matter of fact is very true, that the disease was, during the great epidemic, carried into the country in the bodies of individuals, but the epidemic was not. The whole was merely "carrying coals to Newcastle;" and New Orleans, instead of being chargeable with contaminating and poisoning the mighty ocean of the atmosphere throughout six states of the Union, has been placed before the world by her chivalric sons simply in the light of an angel of mercy to the stricken southwest. New Orleans was indeed the great position of safety against a common enemy, whose favorite field and multitudinous birth places were in 1853 in a special manner in the wide-spread country itself.

There can be no worse sample of bad faith exhibited, than to take any hand in deceiving the public in relation to our city on the health question. The truth should be frankly asserted, and published without either croaking or palaver. I am far from considering New Orleans an unhealthy city, so far as her resident and native population is concerned. The articles that have, from time to time, appeared in this journal, by my preceptor and brother, its present editor, and Dr. S. A. Cartwright, have held up in their true light the fallacies that have been promulgated by those who have attempted to write down the reputation of the city with regard to salubrity. But what will be thought by every physician, possessing the commonest capacity for observation, of this specimen of seesaw disbelief displayed by Dr. Riddell, when he says, "black vomit fevers or types of yellow fever *may perhaps* originate in this region." Not "yellow fever," quoth he, but "black vomit fevers, or types of yellow fever," and only "perhaps originate in this region," at that. Professor Riddell surely is more at home with his retorts, in the laboratory of the university, than in pronouncing on the nativity of yellow fever. This question

can be put at rest by too many reliable witnesses who do not dogmatise, but who know. We ourselves are fortified with eighteen years of observation and experience here; and as an offset to what our able professor of chemistry has said, we assert what we know, and have seen. Not a summer has passed, during the whole period, in which we have not seen *bona fide* cases of adynamic and hæmogastric yellow fever, with black vomit. The local origin of yellow fever is fully shown from the fact that it has appeared here annually, either epidemically or sporadically, for the last twenty-five years. The unmitigated form of yellow fever is not to be mistaken. Cholera itself does not imprint its ghastly character on the body with more fearful truth. A doubting professor of chemistry must throw off his pyrrhonism. The disease has appeared in the Charity hospital every summer for the last eighteen years, and the chances are, that for every single sporadic case in the hospital there were twenty out of it, throughout the city. The disease has not only become native and local here, appearing either epidemically or sporadically every year, but so pervading an influence has the disease, that it imprints its character on numerous other diseases throughout the year. Hence, as we have occasionally witnessed, measles, scarlet fever and dysentery, sometimes terminate in black vomit; also intermittent, remittent and continued fevers are found occasionally to terminate in black vomit, jaundice and hæmorrhages. Space will not permit us to enter further into proofs that the *bona fide* yellow fever makes its appearance here every year. On this point we stand fortified.

Such, then, being the facts, notwithstanding the doubts of a professor of chemistry, with what blighting and damning force do the doctrines of the quarantinists and importationists strike at the prosperity and prospects of our beloved city of New Orleans! If the disease can be imported, it can be exported.

According to the above doctrines, a sporadic case carried into the country, or into another city, might originate an epidemic. If the disease, then, appears here either epidemically or sporadically every year, what can the doctrines of quarantine do, save to invite the whole world to lay our outward bound commerce under the most ruinous restrictions? All the expensive mummeries of fumigation and disinfection of goods must be endured, all the robberies, extortions and vampyreism of officials. If a quarantine be useful, it is not useful to New Orleans. Its advantage could only accrue to those who bring it to bear against our commerce and our interests, and treat our city as a pest-house; and if a *scintilla* of proof cannot be adduced to show that the yellow fever ever did

spread from importation, and if it can be shown (as it can be) that the disease has been repeatedly imported into this city and other cities without spreading—if it can be shown that it is imported without spreading, and spreads without importation, then are the quarantinists struck dumb as the sheep before the shearer. Their doctrines are not only untrue, but injurious to this community.

The leading argument, indeed, which has been made use of in New Orleans in favor of quarantine, is, that it will create *confidence*! There is not, in the whole dictionary, a word suggestive of more fearful associations than this word *confidence*. Let the histories of rotten banks, broken hearts, dishonored virgins—nay, the history of the world bear witness. Nothing is nor has been more common than confidence unworthily bestowed. And, are we justifiable in invoking the confidence of the people and lulling them into security, on the strength of a measure which has been a universal failure? What, save the most absolute proof of utility, should challenge confidence in the premises? Is the *confidence* argument justifiable on any principle of good faith or fair dealing?

The history of sporadic yellow fever in this community, besides being of the greatest interest in showing, *first*, that it may appear, as such, for years without becoming epidemic; *secondly*, the local and indigenous origin of yellow fever; *thirdly*, the absolute inutility of quarantine; and, *fourthly*, the impossibility of spreading the disease into the country by exportation, presents also some other curious matters for consideration. "Commerce is king;" and it is no more permitted to any physician to report cases of yellow fever with impunity, in the absence of an epidemic, than to foretell and "encompass the king's death." This is well appreciated in New Orleans. The laws of the counting-house are inexorable; and the unfortunate wight who takes hold of a sporadic case of yellow fever, and reports it, gets hold of the "Bottle Imp." He is soon given to understand that there is no such case in either the day book or ledger; and he is appealed from to "our most eminent physicians, who have each ten times his practice, and have not yet seen a case." If possible, the disease must be ignored; but it has been found quite impossible. In some seasons since 1837, the sporadic cases have become so numerous that they have been reported under different names; and amongst others, was the very general appellation of "*febris flava*!" on the same principle that gave the craziness of George the Third the name of "*his most gracious majesty's indisposition*!"

Well might our mortuary records of sporadic yellow fever

be marked with a *cætera desunt*. For instance, the cases of Kehm and wife, already alluded to, occurred long before the epidemic was declared—early in the season. He died ejecting the black vomit on his sheets. Afterwards his wife died also with the disease. A reverend father of the church administered the extreme unction, and a dozen persons followed them to their graves, now visible; yet, neither certificates, records, nor any written proofs can be found in the archives of the cemetery to show that any such persons ever either lived or died! Yet, we are often told that we cannot go behind the record, which is a finality! When such *lapses* as these are allowed to occur, what becomes of our implicit reliance on the records?

What man of common information would place implicit reliance on statistics based on mortuary certificates rendered, to a great extent, on the diagnostics of the laity certificates, numerous rendered by citizens, scavengers, deputy coroners, barbers, and all the charlatans and quacks that batten on the credulity of the public?

There has been no end to the assigned causes of yellow fever in this community. There is no end to proposed legislation; but no guide to sound legislation. It is in vain, in the present state of our science, that we call on our law makers to regulate their action by our electrometers, our hygrometers, our thermometers, our barometers, our rain gauges, and our river gauges, in expending the money of a tax ridden people to legislate the yellow fever out of New Orleans. Legislation had better come to a stand when the blind offer to lead the blind. The theories deduced from this meteorological battery are all liable to the same objections that may be urged against the filth theory. These instruments *ad hoc*, are dangerous, for their uses are not understood in making out the result. Let the use of things be learned before used. Let us not share the fate of the nervous youth, who was so fearful of lightning that he procured himself a pocket lightning rod to hold in his hands in a thunder gust! We hope to see a flood of light thrown on the causes and prevention of yellow fever by the sanitary commission. They will do much if they batter down prevailing errors.

The truth is, the cause by which by far the greater portion of the mortality of a city or community is produced, are either conjectural or wholly unknown; though it is in the investigation of these that speculative medicine has exhibited its boldest flights and its greatest self-sufficiency. As a matter of course, in all climates a constant train of mortality lies in wait on the path of all that lives. Death, though certain at last, has for

its causes in every community those which are avoidable, and those which are unavoidable. To draw as far as possible the distinction between these two classes of causes, and as far as possible to apply the remedy to the former, is to do all that lies within the competency of sanitary legislation. No earthly consideration can be of greater importance to any community than such distinction and such action. It overtops almost all other considerations known to medicine—not only securing the maximum amount of salubrity, but solving at once the question of the real salubrity or nonsalubrity of any given district, and consequently serving as a guide to the embarking of capital, labor and life in the same.

The magnitude of these objects has attracted the attention and occupied the pens of the most eminent enquirers in christendom with results, which, though useful and interesting, are little satisfactory to the public mind. The controversial has largely predominated over the positive. The ground here proposed is, it must be confessed, one beset with extraordinary difficulties, and what is most remarkable in too many of those who have occupied it is, that the mania to do and to discover that which is impossible has thrown into the shade the great measures of known possibility and practicability. The spirit that now characterizes sanitary movements in our midst, fully illustrates the truth of this position, and promises a grainless harvest. Nothing is attempted but the impossible. Nothing at present appears to secure sanitarian attention save only the causation and prevention of epidemics—subjects probably wholly beyond the ken and control of man. The avoidable causes of daily death exist in almost every square—are seen unheeded and unremedied.

We have no right, from anything that is known, or from anything that is likely to be discovered, to rank yellow fever as one of the *avoidable* causes of mortality. Its epidemic appearance must be contemplated, in the present resources of human knowledge, as merely an ultimate fact—an accumulative manifestation of the general scheme by which all that is vital shall throw off vitality, and as little capable of explanation as are first principles or self-evident truths. Why matter *constantly* gravitates towards the centre, and why the yellow fever *inconstantly* makes its appearance in certain cities, are, for all that has been determined, equally inexplicable. Epidemics have existed in all ages, and no human agency has ever stayed their march, limited their boundaries or shortened their duration. None of their laws or habitudes have ever been changed or annulled by man. Epizootics have also ever existed, and the animals useful to man have been swept away;

and the sea itself has been invaded, and submarine pestilence has thrown to the surface millions of the finny inhabitants, that a few days before gamboled in health beneath the waves. *Epibotany* (if such a word may be coined) lay waste the domain of the agriculturalist. Beneath the surface of the soil the fatal law is executed, and the food of the Irish nation (the potatoe) becomes gangrenous. Who has descended into the sea, explored the soil, or scanned the mighty ocean of the atmosphere, and can pretend that, in all this, we have to do with an avoidable cause of mortality? Who can ward off the execution of this inexorable law of accumulative mortality? The people of New Orleans may exhaust their private fortunes for protection, the government may lavish its millions, sanitary laws may grow into codes, and sanitary officers into standing armies, but New Orleans and all other cities must be visited by epidemics. "The pestilence that walketh in darkness and wasteth at noon-day," will walk and waste.

At the present writing, an ordinance is proposed to be passed by the common council, which revives and re-embodies all that has hitherto been found expensive, useless and impracticable. The whole twenty-two sections must soon prove a dead letter and fall into disuse. The undertakings set forth in this ordinance are almost too stupendous for belief, and involve an interference with private rights and an extent of jurisdiction that can expect no quarter, and will receive none. The fourth section, amongst other things, gives the proposed health department power over the *elements* themselves! It says: "It shall be the duty of this department to have *surveillance and control over everything* that may affect the salubrity of New Orleans, or have a tendency to impair the same." Sublime surveillance and control! which of course includes the agent that produces yellow fever!

How is the provision in article four to be carried out, regulating the number of cubic feet of space for lodgers—one thousand cubic feet for each adult—unless it is proposed to partially rebuild the city, and provide houses for the laboring classes, who, to economise, crowd into small houses. If the poor cannot pay for the requisite number of cubic feet, will the health department undertake to furnish it. Or, will not the people, outraged by this inquisition on the internal economy of their household affairs, eject these agents from their premises as intruders on their constitutional rights.

For the present, we take leave of our subject. I propose, in a future number of this journal, should time permit, to enter into the consideration of some of the *avoidable* causes of mortality in New Orleans. They are multifarious—their name is legion.

*At a called meeting of the executive committee of the medical society, held at the office of DR. W. P. HILL on Thursday afternoon, September 20th.*

On motion, Dr. Gibson was called to the chair.

Dr. Trent, in a few remarks, explained the object of the meeting, and offered the following preamble and resolutions, which were unanimously adopted:

A mysterious Providence has sent suddenly an unrelenting messenger to execute an office, which has filled our hearts with sorrow. Our friend and associate, DR. P. C. GOOCH, is no more. But a few short days ago, and he was in our midst. The king of terrors has suddenly dissolved the delusive hopes we all so fondly cherished.

The science of medicine offered high attractions to our departed friend. His views were high, and he was steady and inflexible in pursuing them. His stern resolution and loftiness of spirit we could but admire. We loved GOOCH for his virtues, and respected his talents. He had a peculiar claim upon the esteem of all who knew him—for he could only be properly appreciated by an intimate acquaintance. His character never could suffer by being submitted to the rigid eye of scrutiny. Endowed with ardent feelings and keen sensibilities, “kind looks foretold a kind heart within:” therefore,

Resolved, that it is with feelings of unaffected sorrow we learn the death of DR. P. C. GOOCH, whose death has created a void in our circle, hard to fill. We would condole with his afflicted relatives, and mingle the fervent sympathies of our nature with their tears.

Resolved, that a copy of these resolutions be sent to the family of our lamented friend and associate, as an expression of profound sympathy in their sore bereavement.

Resolved, that a copy of these resolutions be entered upon the minutes of the medical society of Virginia, and be published in the *Stethoscope* and the daily papers of our city.

CHAS. BELL GIBSON, M. D. *Ch.*  
W. P. HILL, M. D. *Sec.*

## OBITUARY.

It is but seldom that we have been called to a more melancholy duty than this record of the death of DR. PHILIP CLAIBORNE GOOCH of this city. When cries of distress were borne on every breeze from our sister cities of Norfolk and Portsmouth, he repaired to the scene of woe; and having been an eye witness to the dreadful havoc of the pestilence, he hastily returned to his home—and after completing some business arrangements, with characteristic heroism and self-devotion he repaired again to the scene of suffering, determined to peril all in the cause of humanity. But alas! he had scarcely entered on his humane mission, when he became the victim of the invisible foe.

DR. GOOCH was just entering upon the career of matured manhood. Possessed of decided talents and unusual energy of character, he had before him the prospects of fame and fortune. As a physician, he had a high appreciation of the dignity and duties of his calling, and was a zealous coworker for the maintenance of its respectability and progress.

Having spent several years abroad in the prosecution of his professional education, his views were liberal and enlarged. He was a punctual attendant on all conventions of medical men, and labored efficiently for their thorough organization. He was the founder of this journal, and bravely and successfully encountered all the discouragements of a pioneer in that sphere of labor.

Perhaps his characteristic trait was a bold, independent outspokening of his honest convictions. He sought no advancement or preferment by the arts of the sycophant. Brave, generous, just—possessed of a genial disposition—few men have left behind them fewer enemies, or more attached friends.

THE

# STETHOSCOPE.

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VOL. V.

RICHMOND, VA. NOVEMBER 1855.

NO. XI.

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ORIGINAL ARTICLES.

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## Dr. A. Snead's Hospital Reports.

Continued from September number.

CASE IX.--August 28th--William Cain, aged about thirty, came from Norfolk to this city about fifteen days ago. His health had been poor for some time; was sick when he reached Richmond, but not with the fever. On yesterday morning, 27th August, he felt general muscular soreness, followed by slight chill, which was succeeded by fever, pain of head, back and limbs. He was brought into the hospital at 3 o'clock P. M. to day, 28th August. Condition--skin hot, pulse one hundred and twenty, with moderate force; tongue moist, with light fur; headache; eyes suffused and slightly icteric; intellect clear; bowels constipated, not having been moved since Sunday, 26th. Treatment--He was first put into a general bath, made stimulating by a plentiful addition of mustard. He was kept in the bath fifteen minutes. He expressed himself much comforted by the bath. Being put to bed, he was warmly covered with blankets, and allowed warm lemonade for drink. Cold to be applied to head.

6 o'clock P. M.--Saw him in connection with Dr. Marx; and to relieve the head, ordered cups behind the ear.

9 P. M.—Has been cupped to 3 xv from behind the ear, the effect of which was to reduce the pulse and throw him into a general warm perspiration. Headache much lessened. Ordered a dose of castor oil in warm lemonade.

29th, 9 A. M.—Slept some last night; bowels have been twice freely moved, the stools being soft, consistent and slightly yellow. Kidneys acting pretty well, urine having rather a yellowish tinge. There has been slight bleeding from the nose and mouth. Skin less hot, and slightly moist; headache less; tongue moist and furred; pulse softer, pulsations ninety-eight; expresses himself as feeling better. There is some slight confusion of intellect. Treatment—No medicine, but to be kept quiet, and allowed a little milk and water occasionally.

9 P. M.—Has less fever; intellect rather more confused; has had slight vomiting of a colorless fluid. Directed a mustard plaster over stomach, to be followed by a blister plaster; calomel, four grains; diet as in morning.

30th, 9 A. M.—Blister not well drawn; to be continued on for a short time longer. Has been restless, and mind much confused during the night—more so than on yesterday; respiration a little heavy; surface pleasant; pulse ninety-two; head rather hot, and complains of its feeling heavy. There has been much nausea and some vomiting during the night. The calomel has acted moderately. A blister directed to be drawn on neck and back part of the head.

2 P. M.—Pulse eighty-eight; has passed twelve ounces of yellow urine; intellect not so much confused; surface pleasant; tongue moist, yet appears rather congested. Treatment—Five grains of quinine, to be repeated every third hour.

8 P. M.—Has slept, and expresses himself as feeling better; pulse eighty-four and soft. Quinine to be continued every fourth hour, and a little milk and water or chicken broth to be allowed as diet.

31st, 8 A. M.—He rested tolerably well last night, and says he feels as if he shall get well. He had some sick

stomach—slight vomiting. His bowels have been moved, the discharge being a thin, yellowish fluid, having a very offensive odor. His head is clear; eyes brighter; pulse eighty-two, soft, and almost normal. Treatment—Quinine in two grain doses, to be given every three hours; diet, tea and chicken broth.

3 P. M.—Is evidently not so well; mind more confused; occasionally vomits half ounce of fluid, in which float white flocculi, with here and there a speck of florid blood; is dull, and takes very little notice; pulse eighty-five, rather small and yielding. Directed twenty drop doses of spts. terebinth, to be repeated every third hour.

8 P. M.—Condition about the same. Continue the spts. terebinth.

Sept. 1, 8 A. M.—He has passed a very restless and delirious night. Has had involuntary evacuations from bowels and bladder; has also been much distressed by hiccough, and occasionally vomiting of a shreddy matter, slightly tinged with blood. Ordered creosote in ether and brandy, which promptly arrested for the time the hiccough; which, however, returned after some hours. Gave brandy and water occasionally.

2 P. M.—Is comatose, and cannot be sufficiently aroused to speak; hiccough has returned for a time; will take neither food nor physic; is evidently fading away; pulse very quick and feeble.

9 P. M.—He died quietly at 7 P. M.

CASE X.—August 29th—Charles G. Williams, aged forty-eight, came from Norfolk by the Port Walthall line on the 28th, and was taken sick while on the boat. On reaching this city, he went to the St. Charles hotel, at which place he was visited by Drs. Mayo and Conway, who informed me that he then suffered from headache, pain in back, tongue clean, much thirst; eyes injected, and a little tinged. His bowels had been moved by castor oil and Seidlitz powder. He had had a mustard foot bath, and ice had been applied to

the head. He came into the hospital at noon, and was first seen by me, in conjunction with Drs. Conway and Mayo, at half past one. The bowels, as stated, had been well moved. At this time the pulse was 96, full and soft. In conference with Drs. Conway and Mayo, it was decided to give no medicine, to continue cold applications to the head, and to allow small quantities of ice and iced lemonade.

9 P. M.—Has less fever; pulse eighty-eight; eyes injected; and there is a slightly yellowish tinge of eyes and skin; head hot, and feels heavy; has passed nearly a pint of healthy looking urine. Continue treatment of morning.

30th, 9 A. M.—Drs. Conway and Mayo present. Has slept some during the night; complains of heat of head. Ordered a hot mustard foot bath, and directed 3i of chlorate potass to be dissolved in a quart of water, of which he was to drink small quantities at a time. Pulse eighty-eight.

8 P. M.—Says he feels more comfortable; head continues hot; surface pleasant; pulse seventy-eight. Continue treatment of morning.

31st, 8 A. M.—Has slept very little during the night; head not so hot; bowels have not been moved; pulse soft and full; pulsations sixty-six; has taken the drachm of chlorate of potass. Continue chlorate potass, and ordered the bowels to be moved by a stimulating injection. Tea and chicken broth for diet.

9 P. M.—Has taken a general warm mustard bath, and been allowed hot sage tea, which has induced a general perspiration; pulse soft, flowing, even; pulsations sixty-eight.

Sept. 1, 7½ A. M.—Has passed a more comfortable night, and desires a little tea and bread, which is allowed; bowels have been three times moved during the night. During the day his clothes were changed, and he also changed his bed, crossing a large room in changing from bed to bed. This was done in violation of express orders to the contrary. He also took more ingesta than was authorized.

9 P. M.—Condition not so promising, complaining of undefinable discomfort. A pill, containing calomel, grs. three, and

sulph. morphia, one-fifth grain, was ordered, and to be repeated at midnight, and at six next morning, unless quiet and comfortable without.

Sept. 2nd, 8½ A. M.—He rested pretty well until three this morning, at which time he became restless and began to sink. He is evidently now dying; pulse very quick and feeble; respiration embarrassed. At half past nine, being at the bed side at the time, he was seized with violent nervous agitations of his arms, so violent as to cause the apprehension that he was about to suffer general convulsions. I took hold of his hands, and held them for about five minutes; at the end of which time the nervous agitation sufficiently abated to permit of their being let go and placed at rest. In two or three minutes, he turned himself over on the right side, and almost immediately ejected, with great force from the stomach, about a quart of black vomit. This ejection was not attended by the general muscular effort we ordinarily witness in vomiting, but it appeared as if some powerful force had laid hold of the stomach, and by its sudden and forcible compression thereof, ejected its contents in a large stream to the distance of not less than four feet. The mode of ejection may be not inaptly likened to what will take place when a cask filled with liquid is turned on its side and the bung suddenly removed. After this he did not speak, and in ten minutes ceased to breathe.

It is not unworthy of remark, that at no time previously, during the sickness of Mr. Williams, had he had vomiting, sick stomach, or even experienced the slightest nausea.

CASE XI.—Sept. 7th—George Aab came from Portsmouth several days ago; had been sick some two or three days; was seen for me by Dr. Marx, and ordered to the hospital late in the afternoon.

At 9 P. M.—Drs. Marx and Cunningham visited him at the hospital for me. He then had black vomit, and died before morning. I did not see him at all.

CASE XII.—Sept. 10th—Samuel Williams walked to my office at 8 A. M. and made the following statement:

He came from Portsmouth on Thursday last, 6th instant; was well until last night. He ate his usual supper last night, and at 10 o'clock he suffered a slight chilliness, which lasted an hour, which was succeeded by high fever and some sick stomach, but no vomiting. His bowels were moved on yesterday, and he had passed water at 5 this morning, but none since. Has head ache, and feels foolish. Since leaving his boarding-house this morning, he has walked about two miles, and now feels very much exhausted. He experiences much distress of back and through his body; tongue soft, moist and lightly furred; eyes slightly suffused and painful; pulse soft and compressible; pulsations one hundred and thirteen.

He was cared for as well as circumstances would allow until he could be taken to the hospital, which place he reached at 10 A. M. Having been put to bed, and a warm mustard foot bath used, his pulse was found to be one hundred and twenty-four, full and of moderate force.

In consultation with Dr. Marx, it was decided to draw blood. A large orifice was made in a vein of the arm, and when about  $\frac{3}{4}$  xiv of blood had flown, he became faint. The bleeding was temporarily arrested, and a little ice given; the faintness soon passed off; the bleeding was renewed, and continued until about twenty-five ounces in all had been taken. The pain of head and eyes was almost entirely relieved; the pulse had fallen to one hundred and ten, soft and regular; and a general warm perspiration bedewed the entire surface of the body. He felt inclined to sleep.

At 11½ o'clock—Gave twenty grains of calomel; enjoined the strictest quietude; allowed the mouth to be cooled with bits of ice, but not to be swallowed.

8 P. M.—Has sweated finely; general moisture of surface; pulse one hundred and twenty. There has been no move from the bowels; head relieved; has pain of back. Treatment—A stimulating injection was ordered, but produced very little effect. One ounce of sulphate magnesia was then given, and the following pill was ordered to be taken at 11

o'clock to-night: Calomel, twenty grains, sulphate morphia, one-third grain.

11th, 8½ A. M.—Has had three motions from the bowels, consisting of a dark and slightly yellowish consistent matter. The kidneys have acted moderately well; the head is comfortable and of a pleasant temperature; skin pleasant; pulse softer; pulsations one hundred and ten; expresses himself as feeling better; has slept but little. Treatment—The belly directed to be covered by a plaster of mercurial ointment; no medicine; quietude enjoined; diet to consist of an occasional spoonful of panado without wine.

2 P. M.—There has been a slight move from the bowels; also has passed water; surface pleasant; pulse one hundred and six, soft and regular; quietude enjoined.

8 P. M.—Has slept some; says he feels better; surface is pleasant; head free from pain or confusion; slight pain of back; pulse one hundred and six. The following pill was ordered to be given at midnight, if the patient should be at all restless: Calomel, five grains, sulph. morph. one-third grain.

12th, 8½ A. M.—Being restless, the pill ordered was given at midnight, after which he was more quiet, and slept. He says, he "feels empty," and desires food. His tongue is rather more furred, and a little yellow; pulse one hundred and five. There has been no motion from bowels; kidneys acting. Treatment—no medicine. Diet—tea rich with milk.

2 P. M.—Since last visit he has suffered much pain in his bowels; has had two free discharges of dark and very offensive matter; has been quite restless, and has slept but little; pulse one hundred and seventeen, and rather irritable. Treatment—gave a pill of calomel, five grains, and morphine one-third grain, and directed a spoonful of the following to be given every second hour:  $\mathcal{R}$  Ol. ricini,  $\mathfrak{z}$  i, tinct. opii. gtt. xl. mucilage acacia,  $\mathfrak{z}$  iv. M.

8 P. M.—He has had four evacuations from the bowels, the last two of which have consisted of mucus and blood, stained dark by some dark matter. He complains of much pain in the super-pubic region, with tenderness on pressure.

Treatment—a starch enema, containing forty drops of laudanum; a large blister over the belly; and if pain and sleeplessness continue, to have at midnight half grain of sulph. morphia.

13th, 8 A. M.—Being in pain and not sleeping, he took the half grain of morphia at midnight; after which he was more quiet. He has had during the night six small dysenteric passages, but none since 4 o'clock this morning. Surface is pleasant; head comfortable; pulse irritable, one hundred and thirty. Complains of pain in genitals; has passed  $\frac{3}{4}$  x of yellow urine. Treatment—Sulphate morph. gr. ss.; also a teaspoonful of spts. nitre dulc. to be given every third hour. Diet as on yesterday.

1 P. M.—Is more comfortable; has passed water more freely; less pain about bladder and genitals; has taken a little tea and ice. Continue spts. nitre.

8 P. M.—He is very restless; pulse very quick and unsteady; has had no sleep; bowels unmoved; kidneys acting well. Directed one grain of sulph. morph. to be given at once; also twenty drops of spts. terebinth to be given every third hour.

14th, 8 A. M.—He slept for two hours after taking the morphia last night; since which time he has had no sleep. His surface is cool and moist; pulse very quick and feeble; intellect appears clear; has taken some brandy, and the surface of the body and limbs has been rubbed with brandy and mustard. Ordered mustard plasters to the extremities, and gave brandy and water internally as freely as he will take it. Before 10 o'clock he became perfectly deranged; refused to swallow anything; made violent efforts to quit his bed and go out; had constantly to be restrained.

2 P. M.—Condition much the same as at 10 o'clock; knows me, and calls me Doctor, yet will not allow me to come near him, or do anything for him. Would give him food or drink, but he will not allow me or any one else to do anything for him. He makes strong and repeated efforts to rise and leave his bed, which he would do if not prevented

by restraining force. Altogether, his manner and condition appear like one laboring under delirium tremens.

At 3 o'clock, he was forced to swallow one grain of morphine in solution. Would give brandy, but he cannot be made to swallow it. Pulse very small and rapid; cannot be counted; respiration twenty-two per minute.

6 P. M.—He continued quiet, without sleeping for an hour and a half after taking the morphine. Then again became very restless, and constantly strived to free himself from the restraining forces, and leave his bed, saying he wanted to go away; charges me with practicing towards him cruelty, and says I desire to kill him; appeals to me to let him go home; and refuses to take anything that is offered. By holding his nose he was compelled to swallow one and a half grains of morphine in solution. In half an hour he became more quiet, and drank a little tea.

At 7½ o'clock, not sleeping, one more grain of morphine was given, which he took without objection, and afterwards took some tea.

At 9 and 11 o'clock each, he took three-fourths of a grain of morphine, yet continued restless until midnight, after which he slept some. He quietly died at 3 o'clock A. M. on the 15th.

*Post-mortem made by my friends Drs. Coleman and Bolton, and written out by Dr. Coleman.*

Mr. Williams died at the Richmond hospital September 15th, 1855. Autopsy eight hours after death:

*Abdominal viscera.*—The abdomen being opened, the bowels and their appendages, the omentum and mesentery, observed in situ, presented the appearance of sanguineous engorgement. A decided yellow tinge of the omentum and mesentery was observable.

The mucous coat of the stomach was universally reddened, this congestion being most conspicuous about the cardiac por-

tion. This membrane was neither thickened, eroded nor softened. The mucous membrane of the small intestines presented the same injected appearance as that of the stomach, the redness becoming more and more intense as the large intestines were approached, until about the middle of the small intestines the congestion had merged into inflammation, giving rise to softening of the mucous coat, which could very readily be detached from the muscular coat by the thumb nail or the handle of the scalpel. The mucous coat of the remainder of the small intestines and of the whole of the large intestines presented the same inflammatory softening. The spleen was engorged with blood. The kidneys were healthy. The liver was a shade darker than usual, though its structure seemed unimpaired. The gall bladder was distended with dark green bile. The pancreas, bladder, &c. were healthy.

*Thoracic viscera.*—No traces of disease about either lungs or heart, except some old pleuritic adhesions.

*Brain.*—There was about an ounce of serum in the sub-arachnoid tissue. No effusion was observed in the ventricles. The arachnoid membrane presented a slight degree of opacity and thickening, which gave to it a milky appearance. The pia mater was very much injected, the injection about the convexity of the brain being in the form of distinct vascular arborescences. Towards the base of the brain the redness was more diffused and uniform. Sections of the *brain* proved it to be very much congested. The cortical portion was reddened, and the cut surface of the medullary portion was thickly dotted with red spots. The weight of the brain, as well as its size, was very much increased by the amount of blood it contained.

CASE XIII.—September 13th—Barney Weinhold passed two days and one night in Norfolk; came to Richmond on Saturday, 8th instant, and was taken sick while on the cars

from Petersburg. Was brought into the hospital at 11 o'clock to-day. Had had black vomit since yesterday, which continues; is bleeding very freely from nose and mouth; complains of headache, pain in back and legs; says he has a sense of heat and pain in his belly; head is hot; eyes tinged and injected; pulse soft, regular; pulsations ninety-two; tongue red along the edges, furred and stained with blood. Epigastric tenderness is very marked. He has passed a small quantity of rather turbid yellow urine. Treatment—Ordered small quantities of iced water, and six ounces of blood to be taken by cups from epigastrium.

8 P. M.—Has been cupped, as directed; the blood has not a normal appearance; coagulates imperfectly, and does not separate into clot and serum. Epigastric tenderness much lessened; pulse more feeble, ninety-six. A large blister to be applied over the stomach and bowels, and twenty drops spts. terebinth to be given every two hours. The bleeding from nose and mouth continues to be very free. There has been no vomiting recently.

14th, 8½ A. M.—Black vomit renewed at 1 o'clock A. M. and was frequently repeated; the bleeding from mouth and nose also continued.

At 8 A. M. he had a large, black, tarry looking passage from his bowels, and also vomited a similar matter from his stomach, and soon after died.

CASE XIV.—September 19th—Cicero C. Harrington, aged twenty-eight. The following statement was made by Mr. Harrington:

He passed the 1st day of September in Norfolk, and on that day visited and saw many cases of the fever. He then left, and did not return until last Friday, Saturday and Sunday—on each of which days he went into Norfolk about 10 o'clock in the morning, and left about 4 o'clock in the afternoon, going over to Hampton on Sunday afternoon, at which place he remained until yesterday, when he came up to Richmond and stopped at the Exchange hotel. He continued well

until nearly 2 o'clock to-day, at which hour he was attacked with the fever, and without delay procured a carriage and went to the city hospital; at which place I saw him at 4 P. M.

Condition—Eyes slightly suffused and icteric; complains of a general unpleasant feeling of head and of pain in his body and extremities; tongue moist, with a light yellowish fur; edges and tip red; pulse moderate force, with an occasional interruption in its beat; pulsations ninety-one. Treatment—Warm mustard pedeluvium, and the following, to be taken at one dose: Calomel, 16 grains; quinine, 16 grains; sulph. morph, one-third grain.

8½ P. M.—The entire surface is bedewed by a warm perspiration, and he expresses himself as feeling much relieved. Treatment—His bowels not having been moved, a stimulating injection was given, which brought away only a few lumps of hardened feces. Two ounces and a half of castor oil were then given in a little lemonade. A little ice or iced water allowed to relieve thirst. A pill composed of five grains of calomel and five grains of quinine was directed to be given at midnight, and repeated at 4 and 8 o'clock to-morrow morning.

20th, 8½ A. M.—His bowels have been well acted on; full fecal discharges. He is now sleeping, although he has slept but little during the night. Has taken the pills as ordered, and is directed to take a like pill at noon. He says he feels better; skin quite moist; pulse soft, regular; pulsations seventy-six.

1½ P. M.—Expresses himself as more comfortable; skin moist; tongue moist; sleeps; there has been no action from the bowels or kidneys. The following prescription was made: R Calomel, grs. x; quinine, grs. x; sulph. morph. gr. i. M. Et ft. pills No. x. Of these one is to be given every three hours.

8 P. M.—Has slept comfortably; skin moist; tongue moist; has no headache; pulse soft, regular, pulsations seventy-two. There has been no action from the bowels or kidneys. Treatment—The pills ordered at the last visit to be continued;

and to move the bowels an ounce and a half of castor oil was directed. He was also directed to take a teaspoonful of spts. nitre dulc. occasionally.

21st, 8½ A. M.—The oil has produced two consistent fecal evacuations. Very little urine has passed, and he is very anxious on account of it. Skin is moist; tongue moist, and more furred; he feels a slight uneasiness of head, and some sense of weight about the stomach. Pulse seventy-two, and a little sluggish. Treatment—Continue the pills of calomel, quinine and morphia, also the nitre.

2 P. M.—Has had two small evacuations from the bowels, consisting mostly of a dingy colored mucus. Has passed about four ounces of porter colored urine. Skin and tongue moist; continues to feel some sense of weight about the stomach; pulse seventy-two, and rather heavy; does not deliver itself well. Treatment—The following pill was ordered to be taken at once: Quinine, 8 grains; sulph. morph. ¼ grain.

8 P. M.—The skin is moist; pulse seventy-eight. There has been no action from the bowels or bladder. He says he feels feverish. The following directions were given: If the bowels be not moved by midnight, to take one ounce of castor oil, with the further direction, if the bowels should be too much moved, or the discharges be mucous in character, to give a pill composed of six grains of quinine and a fourth grain of morphia—the spts. nitre to be continued, and cold tea and small bits of ice to be allowed.

22d, 8½ A. M.—I was sent for at 4 this morning, in consequence of his feeling sick at stomach, which rather alarmed him. The oil had produced two fecal evacuations. I directed a large, warm flax-seed poultice to be applied to the abdomen, and gave a wineglassful of infusion of serpentaria Virginian. He soon fell asleep, and now at this hour says he feels much better. He says he experiences a sense of emptiness at the stomach. The skin is moist and pleasant; pulse less labored, seventy-six. Has passed more freely porter colored urine. Continue serpentaria tea every fourth hour; and occasionally a teaspoonful of good brandy with water.

2 P. M.—Expresses himself as feeling better; has passed urine in moderate quantity; pulse soft, seventy-two. Continue serpentaria and brandy.

8 P. M.—Has rested quietly; has had one small dark evacuation from the bowels, and passes occasionally a small quantity of high colored urine. Skin pleasant; pulse soft, regular, seventy-two. Continue serpentaria and brandy.

23d, 8 A. M.—He slept until two this morning, and appears to be decidedly improving. His bowels have been moved by an injection of warm water. Kidneys acting well. Porter in addition to brandy and water allowed.

7 P. M.—He has passed a quiet day, having slept two or three hours; no action from the bowels; kidneys acting well.

24th, 8 A. M.—Has passed a comfortable night; skin pleasant; kidneys acting finely; pulse soft, regular, pulsation seventy; takes porter and serpentaria.

2 P. M.—He has had no action from bowels or bladder since morning visit; surface pleasant; tongue cleaning; he has no desire for food, and has taken none since he has been sick; expresses himself as feeling better; takes porter occasionally; pulse seventy.

7 P. M.—He complains of fullness about the abdomen; has passed no water since early morning; but on being requested to do so, he passed a pint of rather high colored urine; pulse seventy-two. Directed the bowels to be moved by an injection of warm water. No medicine.

25th, 8 A. M.—He has rested well all night; passed urine freely. He has taken a cup of tea with relish, and may now be regarded as convalescent. From this time he continued to improve; his appetite returned, and on Friday 29th, he returned to his hotel.

But for the prudence with which he acted when first attacked, in at once going to the hospital, his life might have been sacrificed.

From my limited experience, I am persuaded that the chances of recovery in this fever are small indeed, if the patient be subjected to fatigue or exposure after the first hours of the disease.

### Case of obstinate Menorrhagia, successfully treated with Injections of Acetate of Lead.

BY P. C. SUTPHIN, M. D. BEDFORD CO. VA.

This case occurred in the person of a female, Mrs. P. aged 27 years, and the mother of five children, whose health, up to the period of her attack, had been generally good. In the early part of last July, she was taken with her regular catamenial discharge, and this continued in its usual quantity, for several days, leading to no suspicion of anything more than the ordinary flow. One day, however, as she was taking a short walk in the fields, the discharge suddenly became excessive, which obliged her to return immediately to the house, where she assumed the recumbent posture, and made use of alum water, a remedy she had learned was good for the excess under which she labored. This had the effect partially to arrest the discharge, and the hope was indulged in that it would cease altogether, as had been its wont, at the accustomed period. That period arrived, however, and it was found that the hemorrhage increased rather than diminished in quantity. Becoming more alarmed about her condition, I was sent for. I found the loss still in excess; the face pallid, and expressive of anxiety, and the pulse feeble, with little or no increase, however, in frequency. There was some tenderness over the hypogastric region, and at intervals, pain, resembling the pains of child birth.

An examination, *per vaginam*, assured me she was not *enciente*; nor could I discover anything, from this examination, that was calculated to induce the complaint, other than a slight inversion of the uterus. I immediately prescribed acetate of lead and opium, to be persevered in *pro re nata*, conjoined with absolute rest, elevated hips, &c. &c. This had the effect to diminish the discharge only to a slight extent, but afforded no permanent relief, further than to stop the uterine pains, the disease now assuming a more decidedly *passive* character.

I next tried the remedies in common use for the disease, such as blisters to the sacrum, astringent injections, muriated tincture of iron, elixir of vitriol, tincture of cinnamon, liquor ergotina, prussiate of iron, &c. but with little or no success, save the tincture of the muriate of iron, which, when first used, had a fine effect, losing its effect, however, in a short time.

Being baffled in every effort to suppress the hemorrhage, I next determined to abandon all articles by the mouth, and inject into the uterus itself the acetate of lead, with the hope that the constringent powers of this substance, coming in direct contact with the bleeding surface of the womb, might lead to beneficial results. In order to accomplish this result, I took a small flexible catheter, which I cut off at the end, and introduced it in the uterine cavity. I next took about two grains of the acetate of lead, with ten drops of laudanum, and mixing the two with half an ounce of water, with a small penis syringe, threw the whole up through the catheter into the uterus. Slight pain attended the operation, but soon subsided, when I took my leave, promising to return on the following day. It was *two* days, however, before I was able again to visit her, but had the pleasure to find, upon my return, that the hemorrhage had nearly altogether subsided, Mrs. P. expressing herself as being "*much better*" than she had been for several weeks.

As the discharge had not altogether ceased, I again used the acetate as on my previous visit, returning three days afterwards, when I found no vestige of the menorrhagia remaining.

Wishing to make "assurance doubly sure," however, I again threw into the uterus about the same quantity of the acetate. Since which time, although several weeks have elapsed, there has not been the slightest return whatever of the disease, Mrs. P. now being able to attend to her domestic concerns, and complaining of nothing save consequent debility.

This case I regard as being especially interesting and instructive, as showing the superiority of the treatment last

adopted over that which is commonly resorted to by practitioners of medicine, for one of the most stubborn diseases which we have to encounter.

It will be seen, that by the common method of treatment, this case resisted all attempts to arrest its progress, and that it promptly and at once yielded to the acetate of lead thrown directly into the uterine cavity.

It is but proper to remark here, that injections of the same acetate had been thrown into the vagina, prior to its being thrown into the uterus, without the least amelioration of the symptoms.

The question recurs now, whether this mode of treating such cases of menorrhagia is not more rational than the ordinary method of treatment, which so often disappoints our hopes, and so often brings into question the ability of the practitioner?

Here, the medicine is brought in immediate contact with the uterine surface, and acts directly upon it. In this way, you can apply not only the acetate of lead, but nitrate of silver, and all other articles of a kindred character, if found necessary.

It is to be hoped that this subject will meet with a more general enquiry from the medical profession; and I have given the result of the present case, with the hope of attracting more attention to it.

**From our New York Correspondent.**

*Eye Infirmary—Treatment of Granular Lids—South Wing of the New York Hospital—New Treatment of Inflammatory Rheumatism—College of Physicians and Surgeons—Inhalation Humbug.*

NEW YORK, August 1855.

GENTLEMEN—This season of the year is extremely unpropitious for obtaining information on medical subjects in the metropolis of the Union. The schools are closed, and the societies have adjourned until cold weather. Many of the physicians being deserted by their patients, have taken the opportunity of rustication, and not much of interest is to be seen at the hospitals. I have, however, not been idle, and send some gleanings, which may be of interest to your readers.

Visited the eye infirmary in Mercer street. This institution presents a fine field for the cultivation of ophthalmic medicine and surgery, exhibiting to the inspection of the student about three thousand cases annually. Dr. Dubois, one of the attending surgeons, was a pupil of the late lamented Dr. J. K. Rodgers, and enjoys a well earned reputation in this branch of practice. One of the patients, for whom he prescribed during my short visit, was suffering from engorgement of the vessels of the cornea, producing, of course, very great dimness of vision. A very large percentage of all the cases treated at this institution are of this character. On everting the upper lid, the proximate cause of this condition was revealed. The surface of the mucous membrane of the lid was covered by hard granulations, which chafed the cornea incessantly during the various movements of the eye and lid. The lower lids were covered with the same sort of granulations, but owing to their more relaxed condition, and being rarely brought into contact with the cornea, had evidently less share in producing the morbid condition of that organ. The treat-

ment is chiefly directed to smoothing down these granulations of the upper lid. Formerly the method constantly used at this institution consisted in the application of a smooth crystal of sulphate of copper to the upper lid. The lid was everted, the sulphate of copper was passed gently over the entire mucous surface brought to view. In a few moments the surface assumed a greenish white color. It was then thoroughly washed by brushing it over several times with a large camel's hair pencil dipped in water. At present a solution of nitrate of silver, forty grains to the ounce, is substituted for the sulphate of copper.

I am gratified to learn that a new and more suitable building is about to be erected, through the liberality of the citizens. Besides suitable wards, it will contain a well arranged operating theatre and lecture room. If, therefore, the medical students who resort to New York are not well acquainted with this speciality, it will be owing to their own negligence or *haste to obtain a diploma*.

In company with Dr. Halstead, another of the surgeons of this institution, I proceeded to visit the new wing of the New York hospital on Broadway. An old, substantial stone building, designed for lunatics—a class of cases no longer admitted here—was leveled to the ground, and a new and more commodious building erected in its place. The citizens of New York, and especially the medical corps, may well be proud of this institution.

The trustees or board of governors, as they are styled, resolved that the new building should be constructed upon the most approved model, and in a style which should do credit to our country. The project was placed before the community, by whom it was most favorably received. The required amount, one hundred and fifty thousand dollars, was promptly subscribed—one individual contributing the noble sum of twenty-five thousand dollars. Such munificent acts as these ought to check the torrent of invective which continually flows from some quarters against *northern* stinginess and meanness, as though these ignoble qualities were indigenous to a northern soil.

The new wing of the hospital is capable of accommodating about two hundred and fifty patients. The building is warmed by a steam furnace, which furnishes an abundant supply of warm, fresh air. Besides this mode of ventilation, there is a coil of steam pipe in the attic, enclosed in a chamber, connected by pipes with all the wards. By means of this, a steady upward current of air is constantly maintained. On the south side of the building are two towers. One of them contains the water closets and bath rooms of each ward, and the other contains an iron stairway as a means of escape in the event of fire. A large dumb waiter, with counterpoise weights, is so arranged that a patient may be placed upon a shelf in the basement story and raised without the least jarring to the ward which he is to occupy. In cases of fracture and of great exhaustion of the vital powers, the value of such an arrangement may readily be appreciated.

A new method of treating inflammatory rheumatism is now in full tide of successful experiment here. It consists of the administration of sulphate of soda, 3i, every hour, and bathing the part with an alkaline solution. The salt thus administered is not apt to purge, but if it should, this action may be restrained by the addition of a sufficient quantity of tinct. of opium.

The admirable apparatus for the treatment of fractures of the femur, described in my communication published in your last December number, is still in use.

Saw the new building in process of erection for the college of physicians and surgeons. This will be a very elegant and commodious building. Educational reforms, however, are far more needed than architectural. The able and enlightened professorial corps of this institution must fully appreciate this fact—and could they shake off their timidity, might seize the golden opportunity of immortalizing themselves by establishing a school which would rival those of the old world.

On the upper part of Broadway I passed the office of a couple of doctors, (foreigners I believe,) by the name of Hunter, who are carrying on a very extensive and profitable system of imposture, professing to cure diseases of the lungs by

means of inhalation. This piece of humbuggery is already, as usual, attracting Virginians, who, after being relieved of the plethoric condition of their purses, return with as full a crop of tubercles in their lungs as they carried from home. To help on this piece of imposture, these empirics parade in the public prints of New York the certificate of a Virginia physician!—while one of the Richmond press, loud mouthed in its advocacy of southern independence and nonintercourse with the north, helps on the cause by a long commendation of the new system, upon its first page! A southern physician furnishes the bait, and a southern paper inveigles victims into the snare of northern imposters!—while southern physicians of skill and talent, who have made this class of diseases their special study, are passed by with neglect!

Our merchants, our mechanics, our lawyers, our schools of learning ought to be encouraged, but southern doctors ought to be set aside for every northern imposter, who buys a license from the state for a five dollar bill, or who remains at home and attracts crowds of patients to spend their money out of the state.

B.

*To the Editors of the Stethoscope.*

As appropos to the occasion and to the subject treated of by our correspondent, we furnish our readers with the following from the Transactions of the Belmont Medical Society:

Within a dozen years we have seen several *foreign* itinerant consumption curers, by means of the inhalation of medicated vapors; but they only succeeded in entrapping the greenest of our gulls.

Fortunately, such exotics do not take root in our latitude. When a well educated physician, not content with the honors and emoluments of legitimate practice, but under the pretext of being a specialist, resorts to the tricks of the mountebank, or in any other manner soils his garments with quackery, for the love of lucre, such an one quickly finds his level in our latitude.

His depredations are confined to the most vicious, thriftless classes, and don't pay. Here in slaveholding old Virginia, intelligent gentlemen protect the laboring classes from such vampires. We have no cod-fish aristocracy or wash-tub gentility to give tone to our society, or currency to *scientific discoveries*.—[EDITORS STETH.

“But there is another class of men, highly educated, possessing great urbanity of manners and of a captivating suavity of speech, always making the worse appear the better cause, that is far more dangerous to society than all the patent pill venders that ever lived. They come in such a guise, that if it were possible they would deceive the very elect. In that class I would put Dr. Robert Hunter of New York. He has severed himself from the regular faculty, and, through the popular papers of the city, he has published a series of letters, bearing upon their face candor, judgment, reason and capability. From these letters we learn that he has made diseases of the lungs a speciality. He starts out with the usual flourish, that ‘of the busy crowd hurrying along the great thoroughfare—or the quiet congregation assembled for devotion—one-fourth are under the hand of this destroyer, destined, if not rescued, to fill a consumptive’s grave.’ Exaggerated. Physicians, he says, follow a daily *routine*, the injudiciousness of which is ‘*condemned by a thousand deaths and unsupported by a single cure.*’ There he walks into the faculty, and the sourest of us might weep rivers of tears without rubbing the eyes with either cayenne or onions, were it not for his declaration, ‘it will be my aim to prove the curability of consumption by *facts and arguments.*’ Good—he deserves a patent for that. The less medicine the better. Besides curing by *facts and arguments*, he boasts also of having put *inhalation* upon a new basis, and adds, ‘I have now the high satisfaction of seeing my labors rewarded by the success which has already given publicity to my practice, and in the public estimation, which is spreading its fame, not only throughout the United States, but the world.’

“Was there ever quackery so rampant? In what region of the earth did mortal man ever receive such honors before? Confound the fellow, he must have studied egotism under Cicero. Does he not know that inhalation was effectually tried and proved inefficient, long before he was born?

“As connected with the cure of consumption, we are told by the Doctor, that he is constantly written to for back numbers of his letters, and at three different times he thinks it necessary to advertise in the public journals, ‘I am compelled by the pressure of my professional engagements to defer the publication of my letter.’ Better yet—he has not time to continue his letters on account of his professional engagements by consultations at his office and correspondence with his patients from abroad. Well then, after wading through fifteen long letters, we come to the omega, headed ‘Cure for Consumption,’ and a long, wild, ranting thing it is. The man or woman, who extracts medical information from that, must be largely gifted with the second sight. There are no new ideas conveyed, except that under his ‘New system,’ eighty cases out of the one hundred, before cavities are formed in the lungs—fifty-five out of one hundred, after cavities are formed, can be cured—that the cures are effected by means of an inhaler, that he himself furnishes—and that the country people may consult him by letter, sending a careful description of the case—(and a lock of their hair?) Not a word about what medicine is to be used in any stage or type of the disease—a thing which might have been done in ten or twenty lines, and which every honest physician would have felt himself honored in conferring so great a boon upon humanity—but the upshot of it all is the general recommendation, that the patient is to inhale wind and vegetable gas, and exhale gold, which latter, by a process of jugglery, readily finds its way into the Doctor’s wallet. These are the tricks played off by this Englishman, not yet five years from the purlieus of London, where likely

‘Sharp misery had worn him to the bones.’

And this is a sample of quackery by educated physicians—euphonious lies—Sinonian guile.

“It gives me no pleasure to speak harshly of a man so well educated and so sincere as Dr. Hunter seems to be; yet I shou'd be derelict in duty to the public and the profession, were I to pass it over. For, so fast a hold has this charlatanism, under the name of ‘New System,’ got upon public confidence, that not only is it the rage with the unthinking multitude, but with many physicians of eminence and merit. The press too, that potent engine, has thrown its influence into the scale. There is looming out only an exception here and there to its trumpet praises. The N. Y. Mirror says, ‘The accession of Dr. Hunter to our medical ranks, with a system of practice that promises to reduce, if not obliterate, the triumphant power of consumption and its cognates, is hailed with more than satisfaction.’ \* \* \* ‘Right here in our midst he has met the ‘incurable’ and restored them to pristine health.’ The New York Herald says, ‘His avoidance of every indication of empiricism, and his rational diagnosis of all affections of the throat and lungs, with his very successful application of remedial agents in the shape of medicated vapor, have caused Dr. Hunter to be already patronized by some of our leading physicians, and his house is daily crowded with patients.’

“Well, then, so far as the testimony of common sense men, of able physicians, of an intelligent press, is concerned, consumption is curable, according to the ‘New System,’ to a far greater extent than has ever before been dreamed of by the most ultra progressionist; and were one to stop and not look behind the evidence, Dr. Hunter would undoubtedly have gained a name more elevated and enduring than any that the annals of history can produce. But, gentlemen, at a former session of this society, I impressed upon you the necessity of caution in adopting evidence, and I would here repeat, that what is esteemed evidence sufficient to carry on the common affairs of life, should be by you viewed only as words full of sound—signifying nothing. Take for instance

an example in *spiritualism*. A man without reproach will come forward and swear on the Holy Evangelists, that he has seen a table standing in the middle of a room, disconnected from all human power and mechanical contrivances, *raise itself* three feet from the floor. You deny it, of course. But what is to be done? He meets your skepticism by the evidence of a thousand living witnesses, who swear they have seen it. Now these men are not dishonest—are not perjured. The error arises from their organization, and the manners, customs and laws of society. Physicians—able physicians become occasionally too credulous, and halloo with the crowd—amongst whom I may mention our Dr. Hare of Philadelphia. To editors of newspapers I would give most excellent praise. They are the men that can

‘Point a moral and adorn a tale;

\* \* \*———coin p—pots, bowls and flaggons,

Int’ officers of state and dragons.’

But I would not trust them as evidences in medical transactions, without at least enquiring how they stand *quoad* black mail. Weigh Dr. Hunter in the scale used by Newton, Locke or Bacon—try him by unsophisticated experiment, and I will venture my life upon it that he cannot show eighty cases out of the hundred curable—no not ten—it may be not a solitary case. *Quack*, applied to such men as Hunter, is a lame term. Villain, swindler, traitor to humanity, would be far more appropriate—and even these terms fail to describe such a vast amount of recklessness and rottenness.

“Such are samples of quackery. I might go on to tell you how Brandreth has made \$350,000 by his patent pills; how Townsend made \$300,000 by his sarsaparilla; Moffat, half a million by his Phoenix bitters; and Pease, \$150,000 by boardhound candy—and I might tell you of a thousand other tricks by which men have made fortunes. Yet what would these things avail? They are already known to you all, and it is not to be expected that I should make any impression upon a people who glory in being deceived.

“To the philanthropist, who is always on the look out for a better day, this view of the recklessness and duplicity of man must be really horrifying. For my own part, I have long ceased to look for much amelioration in the condition of the race, and, of a consequence, would not go many steps out of my way to assist in the latest crotchet. The world has always been as it is now. Has this age, with all its boasted knowledge, produced a better statesman than Pericles, a better poet than Homer, a better philosopher than Plato? Who in sculpture is equal to Phidias? What moralist can surpass Epicurus? Who has excelled the virtuous Cato? This world has been esteemed ignorant and vicious, and great exertions, of late years, have been put forth to change the current. Patriots have flooded the country with Bibles and tracts—with penny cyclopedias and penny magazines and ‘books for the people,’ but where is the change? After all exertions, it now requires 30,000 clergymen in the U. S. to curb the passions of the multitude. According to the census, 10,279 persons were convicted of criminal offences in 1850 in N. Y. state alone. Twelve thousand dead bodies of new born infants are annually picked up in the squares, streets and parks of London, and the number is steadily on the increase. And if education was a specific for the vices and follies of mankind, there should have been no outbreaks for the last twenty-two hundred years, for the sophists four hundred years before Christ taught their pupils to be men of the world—how to get on in life—to be skillful speakers—good men of business—full of resource—ready debaters—sharp practitioners. That is what our schoolmasters teach now. They make *sharp* men, but as for making them *good*, that has puzzled philosophers, divines and the whole brood of reformers from the death of the righteous Abel to the present time.

“In looking at the world, generally, apart from medicine, what do we see? Here flourishes Barnum—a quack than whom there can be none greater—a swindler of the deepest dye, prating about temperance and christianity and reforms. With mermaids and woolly horses he has kept the states in a

continual ferment, and fleeced the people out of much of their hard earned money. With a face of brass, he feels no shame in starting the most ridiculous projects—anything to turn a penny. What, for instance, could be more absurd than his baby shows—just as if man or woman either were responsible for the quality of the children begot. Every simpleton knows that procreation is a process that is gone into *blind*, and that the result is mere hap-hazard, so far as the will of the parties is concerned.

“There flourishes the christian, who has taken as his model Jesus Christ of Nazareth—the finest specimen of humanity that ever existed. If there are any doctrines laid down in the christian code more fully than others, they are *peace on earth and the avoidance of the love of money*. Now, how do his disciples act? Is not their whole course a scene of war and contention, bickering and strife. We have now a religious war going on in Europe by the most powerful nations of the earth—all christian but one. The number of slain will tell the tale how much christianity has to do with it.

“While Rome was in its glory, it is said there were one hundred and seventy-eight distinct theories of what constituted ‘The chief good.’ We have settled it. It is *money*. And yet what we have concluded upon is directly contrary to the doctrines of christianity—we are worshippers of Plutus, while professing Christ. This is quackery in its purity.

“Since, then, profession and practice do not go hand in hand, but are generally antipodal by a law of our nature, it is hardly to be expected that quackery will ever cease. The small amount of power that man possesses to choose the good and reject the evil, should be applied only to the lessening of evil—not to a thorough change, for that is impossible; and in so doing, sensible men should exercise that power very leniently—not by proscription, hatred and persecution, but by love and mercy, never forgetting that

‘To step aside is human.’

J. G. AFFLECK, *Ch’n.*”

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SELECTED ARTICLES.

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## ÆTIOLOGY OF EPIDEMICS—By M. Morton Dowler, M. D.

There is perhaps no department of human enquiry in which a greater amount of inconclusiveness, folly and pretension have manifested themselves than in relation to the ætiology of epidemics. The crude and inconsistent deductions which in this behalf regularly appear and are forgotten, are well calculated to throw distrust over medical philosophy, and to bring it into disesteem. The admitted truths of to-day become the errors and fallacies of to-morrow, and one pretended discovery succeeds another equally pretentious. In other departments of medical science, it is true, we constantly witness deductions which are lamentable enough—as for example, when the science of physiology is given over into the hands of mere men of retorts, galvanic batteries and organic analyses and specious and plausible theories, emanating from and uttered by the oracle of the laboratory, carry the medical mind into captivity—or as when the profession recognize the existence of motion, sensibility, volition, and intellection as localized and materialized by Bell and Hall on grounds very little more trustworthy than those of Des Cartes when he fixed the seat of the soul in the pineal gland—or as when the skull-bump physiology and psychology of Gall and Spurzhein are acknowledged as real science, and taught in medical schools on grounds of no greater tenability than those of Aristotle when he proclaims the ventricles of the brain as idea reservoirs and the *iter a tertio ad quartum ventriculum*, as a viaduct for the transmission of ideas into the fourth ventricle. Medical speculations, however, generally result in some real progress to the science when they come forth claiming the basis of observation and experiment; but, surely so far as the causes of pestilential diseases have been sought to be explained, but little has been given to the world which might not be forgotten without loss, and much has been put forth and received which it were for the public good and the cause of truth should be erased from the records of science. No class of medical philosophers have set up higher and more pompous claims to the title of public benefactors than those who have undertaken to look into causes of epidemics. And what have they bequeathed us? Why, we have inherited

little or nothing but swarms of officers, useless and inhuman commercial restrictions, multiplied public burdens, and the establishment of theoretical falsehoods and fallacies by law and ordinance, to be reasserted by oath to office. We have had plenty of public delusion, false security, deception and extortion, all based on pretended discoveries of the cause of epidemics, and of the means of preventing their extension.

We have had boards of health and quarantines, which have been in their effects little better than inventions to test the enormous endurance and credulity of the excitable public.

We are told by theorists, that epidemics have their origin in some great poison, either atmospheric, terrene, sidereal, organic, electric, ozonic or some other condition or combination of condition, in relation to which no two observers are in accord.

This term "poisons," amongst ætiologists, has been a source of endless confusion, and has led to the utterance of fallacies and incongruities without number. In strict propriety, poisons belong exclusively to the domain of toxicology, and are not assignable to the pathogenic category. There can be no harm, however, in so extending the signification of the term "poison," to include every agency known and unknown, which, acting on the organism, causes it to depart from the healthy standard, provided, in so doing, we do not confound together objects which are entirely distinct, and draw parallel conclusions from the most divergent premises. Let us therefore follow the ætiologists, so far as to give this extension to the meaning of the term, and then it will necessarily follow that poisons must fall in two great classes, namely: 1, the toxicological; and 2, the pathogenic.

Let us compare or rather contrast these classes of poisons, and determine how far they may be identified with each other.

1. Toxicological poisons are cognoscible, appreciable, tangible, material.

Pathogenic poisons have hitherto proven in their external and material character either unknown, inappreciable and intangible, as in their relation to cholera, yellow fever, &c. or known and appreciable only when incorporated in, and co-existent with animal matter, as in syphilis, variola, &c.—otherwise being wholly unknown.

2. The organic manifestations, which attend the action of toxicological poisons, are remarkably invariable and uniform, and respond to the agents administered.

The organic manifestations, in those who have been exposed to the action of pathogenic poisons, are so variable in intensity, that they may be either absolutely null, or exist in

every degree, from the mildest form of disease to the most deadly, as is exemplified in cholera, yellow fever, small-pox, &c.

3. With toxicological poisons the uniformity of effect and organic susceptibility are remarkable.

With the pathogenic poisons of yellow fever, cholera, &c. the want of this organic uniformity in susceptibility is remarkable, absolute immunity attending one person, whilst a second is lightly, a third severely, and a fourth mortally attacked in the same apartment—proving, first, that the pathogenic or objective cause must necessarily be endowed with an uniform potency; and secondly, that the variability of the organic phenomena must be owing wholly to unknown internal susceptibilities, and not owing to variable intensities of the pathogenic agency.

4. The intensities of toxicological poisons are known, determinate, demonstrable.

The intensities of power in pathogenic poisons, we have inferred to be uniform as in cholera, yellow fever, &c. This does not, however, enable us to determine the measure of intensity of that power, as characterizing it under the denominations of strong or weak. For example, immunity from the diseases might be urged to prove the intensity of organic resistance to a powerful pathogenic agent, whilst resulting mortality might be urged to prove intense organic susceptibility to an extremely feeble agent.

5. Organic toxicological poisons are normal, and do not reproduce themselves in the organism in which they induce toxicosis, as the poison of the crotalus, scorpion, hornet, &c.

Pathogenic poisons derived from an organic source, are abnormal and tend to reproduce themselves, as the poison of syphilis, glanders, hydrophobia, &c.

6. Toxicological poisons act with increased energy and danger on the young, the debilitated, the infirm, &c.—females being more easily affected than males.

The pathogenic poisons of yellow fever, cholera, &c. as manifested in the same apartment, often destroy the powerful and robust, while the tender infant and the invalid are lightly affected.

7. The treatment of toxicological poisoning is strictly antidotal, and with reference to throwing off, counteracting, rendering inert, and neutralizing the poisonous agent.

The treatment of pathogenic poisoning as in yellow fever, cholera, &c. is strictly antipathic, and is addressed to the morbid conditions present, and not to any assignable cause of those conditions.

8. No known toxicological poison is capable of producing organic conditions and manifestations identical with those exhibited in pestilential diseases.

No pathogenic poison is capable of producing organic conditions and manifestations identical with those superinduced by toxicological poisons.

9. Toxicological poisons generally teach avoidance by appealing to our sight, hearing, taste, smell and touch.

Pathogenic poisons, as in cholera, yellow fever, &c. have never yet objectively appealed to our external senses; nor do they give us notice of material existence. They are inodorous, invisible, intangible, inaudible, tasteless.

10. Toxicological poisons, administered in the maximum, act with mortal force, and without considerable lapse of time.

Infants may be exposed to the continuous action of the pathogenic poisons of cholera, yellow fever, &c. for weeks, and finally suffer a slight attack, whilst the most powerful and robust subjects may fall victims after a single day's exposure in the same locality.

11. Feeble toxicological poisons produce feeble effects on powerful physical organisms, and it is not possible for them generally to act otherwise.

It is not at all improbable that the obscure pathogenic poison of yellow fever, for instance, may be intrinsically an extremely feeble agent acting on variable susceptibilities. The same may apply to the pathogenic poison of cholera, determining its violence, rendering small-pox distinct or confluent in the same apartment, and in the same, determining the intensity of scarlet fever as simple, anginose or malignant.

12. The existence of toxicological poisons is of course proven by the evidence of our senses. No one doubts either their existence or the source whence they are derived.

The existence of pathogenic poisons is merely inferential, they having no sensible properties, nor have we apart from animal matter any conception of the material cause of variola, rubeola, equinia, or syphilis, no such substances as variolon, rubeolon, equinon, or syphilon ever having been either discerned or heard of. Dr. Mitchell claims to have discovered septon, it is true, but little has been heard of it since his time! The existence of certain external entities determining yellow fever, cholera, &c. is an *ex necessitate rei*, and the only circumstance which renders such conclusion inevitable is the mere ultimate, naked and inexplicable fact of the diseases prevailing in one locality and not in another, declaring a local cause.

13. Toxicological poisons exhibit curative and therapeuti-

cal, as well as morbid effects—are employed as antidotes to each other, and will act any number of times on the same subject.

Pathogenic poisons are purely morbid, and are without therapeutic power. They merely, as in yellow fever, small-pox, &c. confer immunity against a second attack. As it so results that one in three die of yellow fever, as happened as a general result in 1853, and as yellow fever does not afford a guaranty of subsequent health and longevity, the doctrine that acclimation is worth the risk, is not correct—acclimation being simply *risky*.

The data on which it has been attempted to explain the origin of pestilential diseases by the condition of the atmosphere in relation to ozone, are at once simply inadmissible. As a scientific achievement, the disclosures in relation to ozone are most curious and important; but the ætiology of epidemic has not been advanced a single step thereby. Later investigations appear to have given a very satisfactory explanation of the nature of ozone, showing, beyond a doubt, that it is merely oxygen gas rendered chemically active and corrosive like chlorine, bromine, &c. by the action of electricity; and that by this means, from being inodorous and unirritating, it acquires a strong odor and chemical activity like these elementary bodies. Nothing, however, is known of the effects of this electrized oxygen on the animal economy, save that which relates to it as a toxicological agent, Schönbein and others having shown that it is highly oppressive to the lungs, and that small animals are speedily killed by it. The pathogenic power of either the hyper-ozonic or an-ozonic states of the atmosphere in the production of epidemics, comes to us with no other reason or recommendation than the appearance of novelty, for the electrical ætiology is not new. It is said that certain coincidences have been observed to exist between the existence of epidemics and the showings of the ozonoscope. The whole circle of reputed causes can boast of equally strong coincidences, and by the same system of reasoning, the whole might be proven to be true at the same time, however contradictory these reported causes might be. A hundred contradictory causes, doubtless, remain to be discovered with equally invariable coincidences. The invalidity of the ozonic theory may be legitimately inferred without our going out of the chemical laboratory. The ozone of nature's laboratory cannot differ from that observed by the chemist. An abnormal state of the atmospheric oxygen must necessarily be equally visited alike on all; and were such a thing possible as a dangerous hyper-ozonosis of the atmosphere, the

result would necessarily be an universal poisoning effect, as veritably toxicological as could be produced by chlorine gas. Whatever evils, on the other hand, might be produced by the an-ozonic state, must be equally uniform and toxicological. The strong would not be destroyed, and the weak spared, as is often seen in epidemics. The contrary of these positions can never be taken for granted. It must be proven. Nothing but the strongest and most positive proof can ever be admitted to establish the ozonic explanation of epidemic diseases. The pathogenic poisons of cholera, yellow fever, &c. are endowed with habitudes which wholly differ from anything which has ever been discovered, and by nothing which has ever been discovered can these diseases be excited, so far as is known. Nothing but direct experimental proof can be admitted. The pathogenic power can never be admitted on a weaker proof than the toxicological. Both require demonstration, and the former is disproven by the latter.

There is a toxicological poison known by the name of sulphuretted hydrogen, which, above all other substances, has been accused of creating pestilential diseases. What sanitarians have mystified under the name of filth of all kinds, may be simply referred to this gas. It has, with more truth than poetry, been designated as "the essence of all stinks," constituting the nose offending agent in all putrefaction and decomposition, whether animal or vegetable. It exhales from the dead carcass, from the filthy gutter, from the bilge water of the ship, from the privy, and explodes from the rotten egg. Toxicologically, it is, in a concentrated state, a deadly poison. This gas, mixed with the atmospheric air to the extent of only one part in three hundred, and allowed to remain in this condition for a single hour, would leave neither man nor beast alive throughout the city.

As given off from the sources of which we have spoken, it rarely exists in so concentrated a state as to produce fatal effects; though the putrefactive process in a confined atmosphere may readily destroy life. Chlorine and nitric acid, two strong toxicological poisons, decompose sulphuretted hydrogen, and thus destroy its odor. This process is called disinfection, the disinfectants being equally noxious with the body decomposed, all producing deadly toxicosis when pure. The pathogenic power of the sulphuretted hydrogen in relation to epidemics is wholly unproven, or rather it is simply disproven. It mingles with the intestinal flatus; and mineral springs bubbling forth the foetus of this gas abound in therapeutic properties, and the waters of the same are imbibed without stint. This substance constitutes all that truly enters into the

filth platform in relation to epidemics. It constantly abounds in the atmosphere, when the temperature and moisture admit of the putrefactive process. Doorplates, and other silver mountings in front of houses, are blackened by it in a few hours. During the existence of the waters of the *Sauve Crevasse*, decomposition of water, and animal and vegetable matter was so great where the water shallowed itself out into the city, that silver ware both inside and outside of houses was blackened, and the white lead on the painted houses was changed to a dirty brown color. No pathogenic effect could be traced out. During the epidemic cholera which has just swept over Jefferson city and the fourth district of this city, there have been about twenty soap factories in full operation in the rear of the fourth district, in which a strong odor of this gas is constantly given off. We visited eleven of these factories after the subsiding of the epidemic, and found there had not been a case of cholera in the whole number visited. There had been none in the tanneries; in ten vacheries which we visited, there had been but two deaths from the disease. Gormly's basin, which had been recently almost entirely filled up, and that too mostly with manure, filth and garbage, there being an extensive disturbance of the earth from this cause, has had, so far as we could learn, but one case on its margin—the case of a little girl, who speedily recovered.

The experiments of M. Gaspard in the injection of putrid fluid into the veins of animals, are so extremely crude and inconclusive, that it is not a little astonishing that any importance whatever should have been attached to them by the late distinguished and lamented Prof. Harrison. Putrid fish water, and putrid blood and beef water, charged of course with sulphuretted hydrogen gas, were injected into the veins of dogs. Every one can readily realize that a solitary bubble of this gas introduced into the circulation would produce the most disastrous toxical effects. Two ounces of a foetid liquid, injected into the veins of a dog, was a simple instance of toxicological poisoning by sulphuretted hydrogen, rendering the blood unfit for circulation. It would be very likely to produce a throwing off of the epithelium, and a bloody oozing in the stomach and intestines. The capillaries would be extremely likely to give way before the rotting influence of a putrefactive poison diffused throughout the system. No light can possibly be thrown on the ætiology of yellow fever by such experiments; nor can any such morbid manifestations be admitted as being identical with those of yellow fever. If common air admitted into the veins is attended with fatal results, what are we not to expect from a poisonous gas?

The animalcular and cryptogamic theories which have been proposed to explain the ætiology of epidemics, are fully liable to all the objections which must present themselves to every mind on a comparison of toxicological and pathogenic poisons. These alleged living entities have never been discovered to exist. It is bad logic to assume the existence of a cause without proof, and to assume the competency of such supposititious cause to produce a given effect. This was the capital error of the astronomical system of Des Cartes. He assumed the existence of enormous vortices of subtle matter without proof, and then assumed the competency of their gyrations as the motor power of the heavenly bodies. Amongst the organisms, both botanic and animated, which have disclosed themselves either through the microscope or to the naked eye, none of a poisonous nature have ever been discovered which can be shown to be any other than of the merely toxicological kind, or that would on exposure fatally poison an adult, and slightly or not at all poison an infant, and produce any effect whatever on the great mass of the people exposed, as in cholera, yellow fever, &c. But the question as to whether the poison of these diseases be assumed to be organized or inorganic, or whether the great mass of the material world, as some have imagined, be but a mass of living organisms, are questions, however they may be decided, that in no way affect the inadmissibility of the animalcular and cryptogamic pathogeny in cholera, yellow fever, &c. When, if ever, the discovery of the venomous organisms is actually made, all analogy shows that they must be simply toxicological, the larger venomous animals and cryptogamia being simply of this character, there being no reason to suppose that the mere question of size could involve any circumstance of importance. The toxicological character thus resulting can never be reconciled with the pathogenic on any basis which has ever yet been discovered. A demonstration to the contrary would reconcile apparent incompatibilities so far as to solve an entirely new problem in philosophy, and inaugurate a new era in science.—*N. O. Med. & Surg. Jour.*

## LECTURE ON PNEUMONIA—By M. Trousseau.

In No. 32 is a young girl, who has suffered from pneumonia for six days. The disease commenced in the ordinary manner, with shivering, vomiting, pain in the side, fever, and characteristic expectoration. On examination, a very extensive pneumonia was detected, occupying the apex of the left lung, descending in front and laterally to almost its base, leaving only the lower and posterior part of the organ in a sound state. The pulse was very frequent, and of very considerable force and fullness, when compared with the delicate constitution of the patient. To these symptoms were added labored respiration, extreme anxiety, and violent præcordial pain. These last symptoms led M. Trousseau to ask himself whether the pericardium had not become the seat of inflammation; for it is by no means rare to find a phlegmasia passing from the lung to the heart, and reciprocally, in consequence of the numerous anatomico-physiological ties that unite the two viscera, the coincident pericarditis being perhaps overlooked, owing to attention being conclusively fixed on the affection of the organ of respiration.

As in this patient, the entire absence of all physical signs proved the nonexistence of pericarditis. The præcordial pain must be considered as depending upon intercostal neuritis, shown by M. Beau to prevail in inflammation of the parietal pleura—a neuritis which, although affecting the trunk of the nerve, produces pain at its periphery, where the nervous filaments terminate. Thus, a phlegmasia, affecting a portion of the pleura near the vertebral column, induces pain at the anterior part of the chest. So, too, in a pleurisy of the base we find the pain in the hypochondrium, and in that of the apex it has its seat, by reason of the obliquity of the intercostal nerves, in the præcordial region. This was the case with the patient, in whom the pneumonia was accompanied by a pleurisy of the apex.

The prognosis was serious for several reasons, such as the seat of the affection, its extent, and the violence of the febrile reaction. Bleeding seemed contraindicated by the constitutional debility of the patient, and it was deemed prudent to depend upon *kermes mineral*, a preparation of antimony of powerful action, far more manageable than tartar emetic, while it possesses nearly all its physiological and therapeutical attributes, causing (like it) vomiting, and at an early stage of its administration, and, somewhat later, diarrhoea. It is very much preferable to administer antimony in the pilular

form. When it has been given for several days in succession in the fluid form, it produces in the throat and œsophagus a diffused, special irritation, followed by pustules, analogous to those brought out on the skin by the use of the ointment. Kermes mineral produces this effect as well as tartar emetic, though less speedily, and in a less degree. Laennec was aware of the existence of these pustules, and regarded them as a sign of antimonial saturation, analogous to mercurial saturation. That this was an error, is shown by giving the antimony in the form of pills, when pustulation never occurs. Another advantage they possess is that, even when given in double or triple doses, they will not so easily induce vomiting or diarrhœa as does the fluid. Thus, this patient took, during the first two days, fifteen grains, divided into ten pills, one every hour, without any inconvenience.

Some have attributed the therapeutical action of antimonials to an intestinal revulsion. Such was the opinion of Broussais, declaring that all Laennec did was to apply a blister to the intestines; and that admirable clinical observer, Chomel, entertained similar views. Laennec, on the other hand, believed that the remedy was absorbed, and accorded to it in the contrastimulant virtue claimed for it by the school of Rasori. We believe we may simplify the problem by suppressing the vomiting and purging, which furnish, in appearance, some grounds to the partisans of the revulsion theory. Thus, in this patient, with the most complete tolerance of the remedy, the pneumonia remaining locally the same, you find the heat of skin has disappeared, and there is scarcely any frequency of pulse remaining. The antimony has vanquished the reactional phenomena. Absorbed, it has acted upon the nervous system, and through this upon the centre of circulation. In proceeding thus we interrupt the chain established, through the intermedium of the nerves, between the circulatory centres and the organ affected, so that this last remains with its lesion isolated in the chest, as you may ascertain. But the fever and the general phenomena that accompanied it have disappeared, and this is an immense result; for, while we must not neglect the local condition, it is far more important to note the indirect action which this condition exerts upon the economy. It was against this action we directed our contrastimulant, and we have been able to dissipate the excitement, the kind of titillation of the nervous system produced by the local lesion which remains now alone, deprived of the reactions which at first accompanied it. We must, in medicine, bear in mind other things than local conditions and suffering organs, regarding man as a whole, and the manner

in which he is impressed by these. It is to the general condition alone that medication is oftenest addressed, and that even by the partisans of localization, who are far less exclusive than they believe, boldly opening a vein in pneumonia without considering whether this practice is in accordance with their theoretical views.

The kermes will in this case be continued for some days and then suspended, or we shall find the very pustulation produced in the stomach and intestines that we sought to avoid in the upper part of the canal. In a patient in one of the wards convalescence has been delayed by an enteritis thus artificially induced. As a general rule, medication is continued too long in internal affections, perhaps because we are not able to form an exact idea of the condition of the parts. We should rather imitate the conduct of the surgeon, who after having procured a free issue for the pus of a phlegmon, leaves to nature the task of resolving the peripheric engorgement and remaining inflammation. The proper time for staying the hand, is when resolution has freely commenced. Thus, in pneumonia, as soon as the general phenomena have disappeared, and we hear the local signs of returning normal respiration, we must suspend medicines and have recourse to food.

*Rheumatic pneumonia.*—About a month since, a young man was admitted with all the signs of pneumonia, and, kermes having been administered, the next day all traces of the pneumonia had disappeared. To what were we to attribute so sudden a retrocession? Was it the result of treatment, or must we seek for the cause in some peculiarities attaching to the nature of the disease itself? The latter interpretation received some light from what was observed at the next visit, when the left great toe was found red, swollen and painful, the tendinous sheaths along the dorsum of the foot exhibited a like condition. Next day, the right foot was similarly affected, though in a less degree. Two days ago, a woman was admitted with the following symptoms: strong febrile action, redness and swelling of the left leg and foot, and severe pain in the entire upper extremity and trunk of the same side, the pain exciting cries on moving the parts. The patient especially suffered at the left side of the chest, but no abnormal sounds were audible. During the night, cough came on, and in the morning a manifest souffle was audible in the supraspinal fossa, while around and in the infraspinal fossa was heard a fine subcrepitant râle. During the cough, dry crepitating râle and bronchophony were heard, and two or three

pneumonic sputa were expelled. This morning all signs of pneumonia have vanished. Here again I hesitate to attribute such prompt resolution to the treatment, especially as the apex was the part involved—a form of pneumonia regarded by all physicians as especially serious. I prefer explaining so rapid a termination by the nature of the pneumonia itself, which I regard as *rheumatic*.

Too partial to localization, practitioners are only accustomed to recognize rheumatism as affecting certain tissues, viz: the muscles, the aponeuroses, and the joints, and when it manifests itself elsewhere they call it by some other name. This is as if we only acknowledge syphilis as we observe it on the penis, and made so many distinct affections of its manifestations on the throat, skin, etc. But syphilis is recognized to be the disease in all these accidents, and why should it not be so with rheumatism? That it attacks all serous membranes is an indisputable fact since Bouillaud's beautiful researches, which have so much advanced the pathology of the heart. When in the course of acute articular rheumatism any of the serous membranes become affected, it is termed a pericarditis, pleuritis, meningitis, etc. according to the membrane attacked. This is right enough as far as it goes; but for the proper demonination of the disease, which is a kind of definition in a single word, we ought to add the epithet "rheumatic." When a man accustomed to suffer from rheumatism acquires, as a consequence of cold, a pain of the shoulder, hip, etc. he at once says he has an attack of rheumatism. But instead of this pain let there be a sore throat, and both patient and doctor cease to be logical, and call it angina instead of rheumatism; just as if there were not a true rheumatic pain of the fibrous parts of the pharynx and palate, pain followed by fluxion, tumefaction, and redness of the pharyngeal mucous membrane. Do we not find rheumatism of the fibro-serous tissues of a joint accompanied by tumefaction of the subcutaneous cellular tissue, and bright redness of the skin; and why should we not admit the same influence in the delicate and vascular mucous membrane? For my part, I should not hesitate to recognize a rheumatism in such a case, or, if you like it better, a rheumatic angina.

This distinction may serve for the explanation of the very great differences observed in the progress and termination of anginas, regarded by some physicians as being of the same nature. Thus, simple inflammation of the tonsils goes through all its stages, in spite of whatever treatment may be opposed to it, and a patient accustomed to such attacks will warn his attendants of the inutility of endeavoring to prevent

the formation of abscess. A rheumatic angina, on the contrary, will often disappear in the course of a night, whatever the treatment adopted, leaving the physician astonished at his therapeutical success, the result, however, being really due to the essentially mobile character of the affection. Descending lower down in the digestive canal, we can explain those sudden diarrhœas which manifest themselves under the influence of a chill. The fibrous portions of the canal become painful, and the contractions more considerable and more frequent, a fluxionary movement being at the same time established towards the mucous membrane, the secretions of which are increased. Such diarrhœas are of short duration, unless, indeed, the rheumatism takes on, as it may anywhere, a chronic character.

After these considerations, does it seem strange to admit a rheumatic pneumonia? Suppose the pulmonary tissue, or what is the same thing, the fibrous tissue of the extremity of the bronchi, becomes seized with rheumatism, what are the immediate results? Tumefaction and congestion of the mucous membrane and an infiltration of the cellular tissue; that is to say, the anatomo-pathological conditions of œdema or of pneumonia in its earliest stage; with this peculiarity, that such lesions, participating in the fugacious nature of rheumatism, do not possess the fixity and persistence of the lesions of ordinary pneumonia. It is in cases like these that therapeutical results seem so marvelous, and so they would in our own two cases had we not a better reason to give for the rapidity of the cure. They were in fact the examples of rheumatic pneumonia, the one occurring in a young man who was at the same time suffering from rheumatism of both feet, and the other in a girl who had formerly had rheumatism, and together with the pain in the chest, complained of rheumatic pains along the whole of the same side of the body. In similar cases, I shall not hesitate to admit the existence of rheumatic pneumonia, too happy only thus to complete my diagnosis, and to become enlightened as to the amount of importance that should properly attach to my therapeutics.—*London Lancet.*

## DR. FENNER ON YELLOW FEVER OF NORFOLK.

MESSRS. EDITORS—According to promise, I shall endeavor to give you a brief sketch of the terrible epidemic that is now devastating this beautiful city. Your worthy colleague, Dr. Beard, and I arrived here on Saturday evening, the 25th August, and were most cordially welcomed, both by the medical profession and the citizens generally. We were grieved to learn, however, that the mayor, Mr. Woodis, was extremely ill with the fever, and on the following morning he died. The untimely death of the mayor caused us some little embarrassment, as our credentials were chiefly addressed to him, but we were assured on all sides that our visit was most opportune, and that our professional services would be most gratefully accepted.

We found the remaining inhabitants of both Portsmouth and Norfolk in a state of complete consternation, at the dreadful ravages of the pestilence, and all business was stopped, save that of administering to the sick and burying the dead. We were told that much the greater part of the population had fled from Norfolk after the epidemic was declared, and those who were compelled to remain, lived in continued apprehension of attack. We took up our board at the National, the only hotel open in Norfolk, and the general rendezvous of both citizens and visitors. We here met with our townsman, Dr. Thos. Penniston, who had come to Virginia, his native state, to spend a pleasant summer, but on hearing the cry of distress that went forth from Norfolk and Portsmouth, he nobly came to the rescue, and was doing everything in his power to relieve the sick. Dr. Stone, too, of our city had called here for a few days, on his way to the north, and did good service by going round with the resident physicians, and instructing them how to treat and nurse their patients. It must be recollected that the physicians of Norfolk, although a highly intelligent and well educated faculty, had little or no experience in the treatment of yellow fever, not one of them having ever been through an epidemic. Under such circumstances, it may be readily imagined what embarrassment they would feel, not only in the treatment, but also the nursing of patients in this disease. We also found actively engaged here, Dr. Freeman of Philadelphia, who said he had seen a great deal of the disease in the West Indies, and had it there himself, but had never devoted much attention to its treatment. The doctor was indefatigable in his exertions, and certainly did good service. Such was the extent of experience that had

been offered in aid of the Norfolk physicians previous to our arrival.

A temporary hospital had been established some three or four miles from the city, the act of removing patients to which probably caused the loss of more lives than were saved after getting there; and, in addition, the United States naval hospital at Portsmouth, a splendid establishment, was thrown open for the reception of the sick; but, on account of its remoteness from both towns, it was liable to the same objection as the first named. The patients were greatly injured, if not ruined by the effort to get there. The epidemic was rapidly spreading, and the number of sick, of all classes, was already so great, that it was impossible for them to be properly attended to at their homes.

As for experienced nurses, there were but two or three at that time in the city, and they had but recently arrived.

On the 27th of August, Dr. Beard and I were invited to attend a joint meeting of the Howard association, board of health and city government, called for the purpose of considering the state of the public health, and devising some more efficient means of affording relief to the afflicted citizens, especially the poor. Being called on for our views, we suggested the immediate establishment of a large hospital, in a central part of the city, for the reception and treatment of all who might apply for admission; and farther, that the poor who could not be well attended at home, should be taken to the hospital *volens volens*. Our suggestion was adopted, and a committee was appointed with full power to carry it into effect as speedily as possible. We were requested to co-operate with this committee in the selection of a suitable building, to superintend its organization, and take entire control of its medical management. The old City hotel, on Main street, which had recently been evacuated, was obtained, and found to be admirably adapted to the purpose. By the extraordinary efforts of the committee, it was very soon cleaned and fitted up, and in less than three days, we were prepared to receive patients. Fifteen were admitted the first day, and for a short time the influx was as rapid as accommodations could be prepared. A few days after we got under way, a number of physicians, experienced in yellow fever, arrived from other southern cities, to whom wards were distributed with unlimited control. Those who first entered on duty, were Dr. Huger of Charleston, Dr. Reid of Savannah, and Dr. Campbell of New Orleans. The latter, however, soon asked to be relieved, and Dr. Miller of Mobile, who arrived about that time, kindly took his place. A few

days since, Dr. Hughes returned home, and Dr. Skrine of Charleston took his wards. Dr. Beard left Norfolk about the 5th September, and I only retained to myself some small rooms, appropriated to the better class of patients, and also, the large negro ward. We very soon had the hospital equipped with every desirable convenience, and it then went on very smoothly.

The largest number of patients in the house at any one time was about seventy-five.

The whole number of admissions from the 29th August, when it commenced, up to the 14th September, the day before I left, was about one hundred and ninety-three, of which one hundred and forty-three were whites, and fifty negroes.

Total number of deaths sixty-nine, of which, three were colored. One of these entered in a hopeless state, one was an intemperate man, and one a bright mulatto girl.

The total number discharged was seventy-eight.

The number remaining in the house was forty-six; of which, thirty-one were whites, and fifteen blacks.

The mortality was thirty-four and three quarter per cent. or one 2.80 of the admissions.

This rate of mortality will compare most favorably with any yellow fever hospital that ever was opened in any part of the world; and when we consider that here, as at the Charity of New Orleans, patients were admitted in all stages of the disease, some of them actually moribund, and that nearly half of the deaths occurred within thirty hours after admission, the general result will appear still more satisfactory. It is but just to say, that the credit of these very favorable results is chiefly due to those physicians who had charge of the principal wards, and I take pleasure in testifying to the kind and vigilant attention they bestowed upon them. There came on from Savannah and Charleston a number of second course medical students, who rendered important assistance in the wards, and in conducting the apothecary department. I am sorry to have to add, that several of these noble young fellows are now down with the fever, and two of them in a dangerous state. In the management of my wards, I received much assistance from young Dr. Bignon of Augusta, Ga. who was with us at the Charity hospital last winter.

So much for the new Howard infirmary, which, notwithstanding the favorable results just presented, was signalized as "a slaughter-house" by a correspondent of one of the Petersburg papers. Indeed, it was somewhat remarkable to see in the newspapers the strange and exaggerated reports that were put in circulation by their Norfolk correspondents.

Dame rumor seems to have reveled in the calamities that overwhelmed this ill-fated city—multiplying the horrors of the epidemic, killing off people, bringing them to life, and then slaying them over again, thus harrowing up the feelings of distant relations and friends. The naked truth and sad realities were bad enough, without being heightened by fancy or falsehood.

When I arrived in Norfolk, the epidemic was increasing with frightful rapidity, every day adding many new cases to the already enormous list. Some of the physicians told me they had from fifty to seventy-five patients on their visiting list. It was almost impossible to obtain carriages enough, and the fatigue was consequently very great. Fortunately, benevolent physicians and nurses continued to come in from all directions, in sufficient number to supply the increasing demand for medical aid; but, on the other hand, many of these noble spirits were themselves liable to take the disease, and in a short time they began to succumb. Among all the distressing scenes around me, I witnessed no objects more worthy of sympathy than those benevolent physicians and nurses, who had rushed into the midst of imminent danger, with the hope of saving some of their fellow beings. Cases of this kind became so numerous, and the danger so evident, that the editors of newspapers, before they all suspended, issued separate warnings to all unacclimated persons, and advised them to stay away, as they could do but little good; but it was of no use; they continued to come in, regardless of danger, and were almost invariably attacked shortly after arriving. Thus perished Dr. P. C. Gooch of Richmond, a gentleman of fine attainments, and founder of the Virginia Stethoscope, Dr. Smith of Columbia, Pa. a young physician, who had gained considerable distinction in a severe epidemic of cholera that prevailed there last year, and Dr. Craycroft of Philadelphia, a very clever young man. Many others were attacked, but had the good fortune to recover. Among these, were Dr. Morris of Baltimore, a gentleman, who came early in the epidemic, having resolved to risk his life in learning to combat a disease, which might soon visit his own beloved city. He did a very large practice before he was taken down, and fortunately, had but a mild attack. Dr. Marsh of Philadelphia had yellow fever fifteen years ago at Apalachicola, and thought himself safe; but he was attacked. And so likewise Dr. West of New York was attacked, notwithstanding he had been in Savannah during the terrible epidemic of last year. A number of visitors were attacked, who had suffered the disease at other places. Among these,

were some of the medical students from Savannah and Charleston. We had a case in the hospital of an old man, who said he had the disease in 1796. He was one of the very few old men who recovered from this epidemic. As in New Orleans in 1853, several persons had two attacks of this fever, though the first was generally mild.

The resident physicians of both Norfolk and Portsmouth suffered severely from the epidemic, no less than seven having died in the former place, viz: Drs. Higgins, Constable, Halson, Briggs, Nash, and the two Drs. Sylvester; and three in Portsmouth, Dr. Trugin, and two others. Dr. William Selden and Dr. Schoolfield have been attacked, and recovered. But five of the Norfolk physicians have escaped thus far, and two of these have suspended practice on account of affliction in their own families. Drs. Moore, Wright and Henry Selden are the only ones who have kept going all the time. The rest of the practice is attended to by strangers.

*General character of the disease.*—Although there was a great number of mild attacks that yielded readily to treatment, I think the epidemic may be said to be one of the severest and most fatal ever witnessed. Black vomit was commonly observed in fatal cases, though there were numerous recoveries, especially in young persons, after the appearance of this usually fatal symptom. Uterine hæmorrhage was exceedingly common, but other hæmorrhages were more rare than we usually see in New Orleans.

Suppression of urine was exceedingly common in the latter stages, and almost invariably a fatal symptom.

The febrile excitement was generally of a low grade for yellow fever, and sanguineous depletion was but seldom strongly indicated; yet, I have no doubt that many cases would have been benefited by the more free use of cups and leeches than was practiced.

The pains of the head, back and limbs were less severe, I think, than we commonly observe in New Orleans.

There was a general tendency in the old, or those who had passed the meridian of life, to sink after reaching the critical stage, although the symptoms had been mild from the beginning. There appeared to be a want of recuperative energy in the system, which could not always be acted on by stimulants and nourishment in the hour of need. Delirium was often observed, and generally a bad symptom. Yellowness of the eyes and skin commonly appeared at the critical stage, and was most intense in severe and fatal cases.

*Treatment.*—Among such a number of physicians as was assembled at Norfolk and Portsmouth from various places, you will not wonder that quite a variety of treatment was pursued. The first and great difficulty labored under by the resident physicians, a highly intelligent and well educated body, arose from a want of familiarity with the natural aspect and course of the disease; and the next, a lack of experience in the effects of remedies upon it. We may readily imagine the embarrassments that would necessarily arise from these two sources. It is vain to expect to obtain from books all the information that is wanted in the management of this or any other disease. Much that is readily useful, cannot be expressed either by the tongue or pen. To know how an ordinary case would progress to a favorable or fatal termination without any interference of art—when a case is doing well and when badly—and above all, when we should stop giving medicine and trust to the efforts of nature, can alone be obtained from observation and experience. To know how a yellow fever patient should be nursed, is a matter of no little importance. Now, the resident physicians of Norfolk and Portsmouth had never before seen an epidemic of yellow fever, and of course were defective in their knowledge of many of the above particulars. Hence, the visits of Drs. Penniston and Stone of New Orleans were so peculiarly opportune at the time they came. They conversed with nearly all the resident physicians, went round with them to see their patients, and gave them valuable clinical instruction on matters both great and small. The same course was pursued by other experienced physicians as they came in; but there soon appeared an embarrassment of no small magnitude, in the fact, that but few of them, although coming from different places where yellow fever is a common disease, were found to agree either on the method of treatment or nursing. There was a difficulty not to be settled; therefore, each was allowed to pursue his own course, and the resident physicians were at liberty to select from the whole such theory and practice, as they thought to be most judicious, and appeared most successful.

I may mention one marked discrepancy between the physicians of New Orleans and Charleston. The former recommended the treatment to be commenced with a hot mustard foot bath, and a dose of castor oil, or some other mild purgative, merely to evacuate the intestinal canal, and the patient to be covered with a blanket, so as to keep up a continued, though not excessive perspiration, from the beginning of the attack to the end of the critical period, cold applications to

the head, and local depletion, if indicated by the severity of the pain. Whereas, the latter pursued a cooling plan of treatment from the beginning—the bowels to be gently evacuated, but febrile excitement was to be kept down by the free application of cold water over the head and body, and the use of very light covering; the object being not to keep up a sweat, but only a gentle perspiration, or merely a soft skin. For severe headache, they recommended the free and frequent use of the cold douche. They also advised the use of cold drinks throughout. Such is the general plan pursued by the physicians of Charleston, as far as I learned from my friends Ravenel and Huger, two highly intelligent and accomplished physicians, and I must say, it was approved by Dr. Wilson of Havana, a physician of extensive experience in this disease. We all, however, concurred more fully in recommending mild remedies in the second and third stages of the disease.

I have only mentioned one discrepancy as worthy of special notice, because it relates to a general plan of managing yellow fever patients. I stated to my professional brethren, that whilst almost every possible variety of practice was pursued by some one or more persons in New Orleans, yet, if there was a single point in which there was a greater concurrence amongst the regular and experienced physicians than any other, it was the propriety of keeping the patient covered with at least one blanket, and sweating freely, though not immoderately, throughout the attack.

In this epidemic, the physicians of Philadelphia and Baltimore, as far as I learned from conversing with Drs. Freeman and Morris, pursued a mild course of treatment. The same may be said of Dr. Reid of Savannah and Dr. Miller of Mobile. I have not time at present to say more about the treatment of the Norfolk epidemic, as you must have this in time for your next number. Perhaps I may recur to it on a future occasion. Of one thing I am pretty sure, which is, that whatever practice was pursued, no one, so far as I learned, had reason to boast of any extraordinary amount of success. When this epidemic shall have passed away from these unfortunate cities, as I trust soon it will, and a full report made of the number of persons exposed, attacked, escaped and dead, I venture to predict the results will be found to substantiate the following remarks of Dr. La Roche, in his great work on yellow fever, just issued from the press. In his chapter on mortality, the learned author says: "The reader need scarcely be informed, that the yellow fever, wherever it has assumed the epidemic form, has fully established its

claims to being classed among the most formidable diseases to which the human body is liable. This is true, whether we view it in reference to the changes it very generally occasions in the domestic arrangements of a large portion of the exposed population; to the great sacrifices of interest and comfort it entails on these—the necessary effects of the interruption or cessation of commercial and other pursuits; of the abandonment of home, and of the sundering of ordinary ties and occupations—to the perversion of the better feelings of our nature, to which it too often gives rise; or to the immense loss of life it occasions, as well, proportionately, to the amount of the population at large as to the number of the sick. In this latter respect, no disease, the black plague of the fifteenth century, and the Asiatic cholera in our own days excepted, can compare with it.”

A remark upon two more points will close this already too long and hastily written letter. The noncommunicability of this disease would appear to be fully established by the facts that numerous cases have been taken to Baltimore, Richmond, Petersburg, various country seats, and even to the village of Hampton, only five miles from Norfolk, whence physicians went to visit them daily, and in not a single instance that I have heard of, has the disease been communicated to the attendants, although they had never had it before.

As to the origin of this fatal epidemic, it is somewhat involved in mystery. So far as the facts have as yet been ascertained, it is very doubtful whether it originated entirely from local causes, or from a materies morbi imported from the West Indies by the steamship Ben Franklin. But more of this anon.

In closing, allow me to say that nothing could exceed the deep sense of gratitude displayed by the people of these cities towards their benefactors in their days of trouble. I hope to be with you again by the 15th of October.

Yours truly,

E. D. FENNER.

*Norfolk, Va. Sep. 14, 1855.*

P. S.—The number of deaths from yellow fever in Norfolk up to this time, is about 1,050; in Portsmouth, about 550.

*N. O. Med. News and H. Gazette.*

ON THE USE OF SALT WATER BATHS IN CHOLERA—By  
Thomas Henry Starr, M. D. Edinburgh.

Having observed some interesting remarks in the *Lancet*, respecting the virtues of salt as a prophylactic to epidemic cholera, and as the views there published in connection with that important subject coincide, in a great measure, with my own, I am induced to carry on the argument by furnishing the results of my recent experience thereon, as being indicative of the power and property possessed by salt, not only of warding off the assaults of the pestilence, but likewise, when properly applied, of preventing the fatal effects after it has seized upon the human body.

I should have tendered this communication for publication at an earlier period, had I not been led to transmit my statements to the general board of health in October last, in compliance with the requisition which was individually addressed to the profession a short time before, urging them to furnish special information on the disease wherever it was in their power so to do.

I have no doubt it will be allowed that I had reason to feel surprise when, upon examining the report of the treatment committee of the medical council, and the classification of the two thousand seven hundred and forty-nine cases therein contained, I could find no reference whatever made to my contribution, or to any therapeutic method bearing the least resemblance to that which I had adopted with such signal advantage. I did not fail to remonstrate in the proper quarter; but hitherto, the omission remains without any satisfactory explanation. Granting that my whole course of reasoning on the matter might emanate from too humble a source to be deemed worthy of official consideration, still I might claim a fair representation of the *facts* as they occurred to me, with a concise statement of the principles which guided me in the employment of a *remedy which proved so eminently successful*.

As it is generally admitted that the treatment of Asiatic cholera in the stage of collapse is a *questio vexata*, still open to enquiry, any practical information which tends to bring that fearful malady under subjection, must needs be regarded amongst the most important and valuable contributions to medical science.

As long since as the year 1849, I had reasons for entertaining the opinion, which I made known at the time, that the systematic and persevering use of the strong salt water bath, at a specific temperature, ranging from one hundred and six

degrees Fahr. to one hundred and twelve degrees Fahr. (the latter being the degree which comes under the denomination of fever heat,) would be found an expedient of uniform and great practical value in the worst forms of collapse, and more especially so when, from our earliest attendance, we find we have to deal with the disease after it has reached the point at which the intolerance of the stomach to the normal action of internal remedies renders the administration futile or even worse than useless. The course of reasoning which drew me to this conviction was founded, to say nothing of the laws of endosmose, on the vital property residing in the skin, of permitting the absorption of fluids into the circulating vessels, as proved by physiological experiments of admitted authenticity, as well as by the many familiar examples of the endemic transmissions of therapeutic agents when partially applied. It has been ascertained, moreover, that nutriment may be conveyed through the same channel; and Mr. Erasmus Wilson, in his valuable work on the Skin, says, at page 45, that "instances are on record, in which bathing in warm milk has been successfully employed as a means of supporting life, when the communication between the mouth and the stomach was impervious."

The remedial measure which I have tested and found so practically efficacious, has the advantage of not requiring internal administration. Indeed, I am convinced that those practitioners who exclusively or chiefly rely upon internal treatment in the collapse of cholera, will ever be doomed to disappointment in the great majority of such cases, for this obvious reason, that the stomach rejects them *in limine*; and as the blood, from the impetus of the disease, has already parted with the greater portion of its saline and watery constituents, whilst the residue has become cold and stagnant in the heart and vascular system, it stands to reason that our best chance for the reaction and recovery depends upon a prompt, vigorous and well sustained restoration of its heat, its saline impregnation, and its purity. Without further comment, I will adduce the evidence which has confirmed my belief, that a favorable result may be almost uniformly accomplished under the worst symptoms of collapse by the comparatively simple and easy process which I have tried and recommend. The portion of salt I use is about half a pound to each gallon of water.

The sectional outbreak of the pestilence which supplied me with material for this communication, occurred here on Sunday, the 30th September 1854. Its invasions and phenomena were characterized by a peculiar intensity and virulence; its

distribution was circumscribed, whilst its existence was transient in the locality where it took place. The houses in which it appeared—viz: Nos. 2, 3 and 21—were crowded with inmates, and probably the least cleanly in the whole street, which is a comparatively obscure one, intersected by the boundary which separates the two parishes of Brighton and Hove.

Two children living on the first floor of 21 Cross street, respectively named Wm. Moses Glover, aged nine, and John Glover, aged four, were suddenly seized with the epidemic about one o'clock P. M. on Saturday, September 30th, 1854. They both died shortly after midnight, little or no medical aid having been obtained for them.

The next case happened the following day, viz: Sunday, October 1st. The name of the victim was Eliza Stevenson, aged fourteen. She was attacked, her mother told me, shortly before seven A. M. and although she received the assiduous attention of the medical officer of the district, she died the same evening, after twelve hours of great suffering.

The fourth case in this neighborhood was the first which came under my control. The patient's name was Sophia Pyrke, aged twenty-two, a servant out of place, lodging with her sister at No. 2 Cross street. I was called in to this person on Monday, October 2d, 1854, near midnight. She had been suddenly attacked with symptoms of the disease less than two hours before. When I saw her the cramps were very severe in the abdomen and lower limbs; the countenance was sunk and anxious; there was a remarkable coldness of the body, including the tongue and fauces, with frequent paroxysms of vomiting and purging of fluids, closely resembling rice water; the pulse was scarcely perceptible. Other remedies, inclusive of calomel and cordial antispasmodics, failing, I had recourse to immersion in hot salt water at one hundred degrees Fahr. Under its influence the action of the heart and pulse speedily rallied, and with the return of animal heat, the other dangerous symptoms gradually abated. The fever of reaction was slight, and this patient recovered rapidly.

The second case I attended was that of Thos. Buckwell, aged forty-three, living on the ground floor of 21 Cross street, being the same house where the children named Glover died three days previously. He was attacked with the worst symptoms of the disease on the forenoon of Tuesday, October 3d, 1854. I gave calomel freely, combined with opiate confection. I likewise gave cordials of various kinds: Nevertheless, the characteristic vomiting and purging, with cramps, increased in severity until the evening, when he was

completely exhausted, collapsed, cold, livid, and pulseless. Under these apparently hopeless circumstances, I resorted to prolonged immersion of the whole body in the hot salt water bath, at one hundred degrees Fahr. with immediate, signal, and triumphant success. The pulse rose gradually under its influence; both sight and hearing, which had been much impaired, were simultaneously restored; the vomiting and purging became less frequent; the cramps left him, and the dejections soon presented a bilious tinge. The consecutive fever was considerable, and accompanied with a brownish tongue and slight delirium. In a few days, however, under careful management, this patient became convalescent.

The third case on my list, from its extreme virulence and obstinacy, afforded, if possible, still more conclusive evidence as to the specific value of my mode of treatment. The sufferer's name was Ann Shearing, aged twenty-nine; married, and living in the top story of the house inhabited by the Glovers and Buckwell, viz: 21 Cross street. She was seized with general prostration, vomiting and purging, with violent cramps, on Tuesday evening, October 3rd, 1854. She was attended throughout the night by the medical officer of the district, who sent for me between six and seven o'clock the following morning, when I found the patient in a state of perfect collapse. Her countenance was shrunk, and death-like in the last degree; she was livid and without the least perceptible pulse; the heart, limbs and abdomen were tormented by cramps, which came on in paroxysms, as did the retchings, accompanied with copious rice-water evacuations. She complained in a marked manner, but feeble, whining voice, of inability to see or hear distinctly. In this case, calomel had been administered in one large, and subsequent small doses, without any palpable benefit. In this unpromising condition she was plunged, with all possible despatch, in a strong salt water bath, which I steadily maintained at one hundred and ten degrees Fahr. Under its influence, the cramps almost instantly vanished. The heart's action became gradually excited, and the pulse at the wrist returned. I watch the rise and progress of the returning circulation and functions with intense interest and satisfaction; and with a succession of facts like those I have recounted staring me in the face, I could draw no other conclusion than that the brine bath, approaching fever heat, is a practical remedy which more effectually mitigates the sufferings, and approaches more nearly to the character of a specific, in the collapse of cholera, than any other with which I am acquainted; and I believe I have investigated the merits of them all. After being in the bath

for half an hour, the patient was lifted out, and laid between hot blankets. The vomiting and purging had sensibly diminished in violence and frequency, whilst the dejections soon showed a bilious discoloration. The arterial action and general warmth of the frame seemed to be well established. This improvement, with slight fluctuations, continued till the following morning, when the patient showed signs of relapsing into the worst stage of the disease. Without hesitation, I again had recourse to immersion in the hot salt water bath, the curative effects of which were even more conspicuous and decisive than at first, inasmuch that the symptoms and danger were effectually and permanently subdued by it. The febrile reaction which ensued, though protracted for several days, was of a moderate kind, and by the expiration of a week, this patient was quite convalescent.

I might add to the foregoing cases, that of Elizabeth Glover, aged twenty-six, mother of the two children who first died. She was affected with the worst symptoms of the epidemic, and became my patient. She suffered very severely, and her recovery was mainly due to the hot salt water treatment.

During the same week, there were two elderly people, named Martin, carried off by the Asiatic cholera, which ran its course very rapidly. They occupied the top floor of one of the infected houses, namely, No. 3 Cross street. I was not concerned in the management of those cases, and I only adduce them as additional and undeniable proof of the malignant nature of the disease as it appeared in that locality.

I might strengthen the testimony in favor of my remedy by adducing the case of an elderly woman, named Richardson, whom I attended a fortnight before in Upper North street, Brighton. Suffice it to say, at my first visit I found her rapidly advancing in the collapse of cholera. Her cure was brought about principally by the external agency of strong salt water at a very high temperature.

The internal remedy (if so it may be called,) that I found most useful in the collapse, was the Wenham lake ice. My patients said it materially assuaged their suffering, and strange to relate, "warmed" them. Its *modus operandi* seems to me to depend upon the astringent or constrictive property of cold, by reason of which it restrains the morbid elimination of serum from the gastro-intestinal mucous surfaces. I then used it simultaneously with the hot salt bath, the good effects of which it appeared to promote.

With regard to the treatment in the premonitory stage, that is, anterior to collapse, I may observe that I arrested the disease at its onset in three if not four cases which occurred

in the infected quarter, by the administration, not of tartar emetic or ipecacuanha, but by stimulant emetics, consisting of salt and mustard in equal proportions, followed by an active dose of calomel.

Lastly, it is worthy of notice, that the ravages of the pestilence were confined to three houses in Cross street. Whether this interesting result depended on the disinfecting measures that were adopted, I cannot positively determine, but I am inclined to believe it was so, as I effectually fumigated them from the basement to the roof with chlorine gas, copious volumes of which I obtained by pouring one part of strong vitriol on a mixture of two parts of black oxide of manganese, four of salt, and one of water.—*London Lancet*.

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TREATMENT OF SCARLET FEVER—By B. W. Hall, M. D.  
Nashville, Tenn.

Our city has been exempt from epidemic scarlatina for the last seven years—the time of my residence here—how much longer I am unable to state; but since the latter part of the past winter it has been doing its work of death in our midst—yet the attacks have not been general—indeed, in many instances, only one or perhaps two of a family of children have taken it, whilst others escaped. According to the number of cases, the mortality has been fearfully fatal; and from my experience and observation of the disease, in this and a neighboring city, I have been inclined to regard scarlatina as one of the most formidable diseases that afflicts our race, not excepting that loathsome disease, “small-pox.” Hence, I am induced to present to my colaborers in the field of humanity a course of treatment which thus far has proven much more efficacious than any I have formerly employed, being such as recommended by our text books. While I do not claim for these, or any other remedies, infallibility, I must state that since their adoption I have not lost a single case—indeed, have not had one to become dangerous. This may in part be owing to the fact, perhaps, that in cities we usually see such cases early.

Under the following course of treatment, the disease seems to abate, and there is a sudden transition to convalescence, not presenting any of the unpleasant or fatal sequelæ, that usually attend the disease.

I do not propose writing a treatise on scarlatina, as it is not unfrequently (and I think justly) urged, that many essayists,

for our medical journals, are too prolix, presuming great ignorance on the part of their readers. Medical journals are intended for, and read almost exclusively by, men whom it would be, at least, modest to presume as familiar with the etiology, pathology, symptomatology, and indeed all the family of ologys, as the writer himself. It is a great bore to the practitioner to be compelled to wade through the first principles again and again, to arrive at the gist of an essay.

Without then even classifying this disease, having found the treatment equally adapted to all its modifications, and presuming my readers to know scarlatina when they see it, I will proceed at once to detail a course of treatment which I have found most efficient.

Being called to a case of scarlatina, and finding the patient overpowered by the disease, as evinced by a feeble, unsteady pulse, deficient capillary circulation, cool skin and extremities, eruption scarcely perceptible or altogether wanting, I direct my patient to be enveloped in a blanket saturated with hot mustard water, and surrounded with bottles of hot water—over all to be placed dry blankets, to prevent a too rapid evaporation, and to drink freely capsicum tea. If my patient, on the contrary, is found with hot skin, full and frequent pulse, I direct him to be enveloped in a sheet wrung out of cold water, and to drink freely of cold spring or ice water. Treatment in each case to be repeated and continued until the desired end is obtained, viz: an equilibrium. In a few hours, often in a few minutes, the first named case will have a soft, firm, regular pulse, a warm, moist glow pervading the whole surface, and a free healthy eruption. In the second case the patient will soon cease his restless tossing about, fall into a sweet slumber, to awake calm and comfortable. My patients are now relieved, not cured. I then order sulphate of zinc in solution, two grain doses, to be given every two hours, to drink freely of capsicum tea, and be anointed from head to foot with fresh butter, lard or olive oil, every two or four hours, according to the condition of the skin. This generally is sufficient to prevent a return of the intensity of heat—but if not, I again use the cold sheet.

Since the adoption of the foregoing treatment, my patients rarely require my attendance longer than the second or third day—and if in charge of an intelligent nurse, I have little else to do but to direct, “continue treatment,” except such general attention to the bowels as may be indicated, and treating, on general principles, such incidental and extraneous affections as may arise in the progress of a case.

I claim no originality for the employment of any one of my

agents. It is to the combination I attribute the remarkable and speedy relief given. It would be indulging in what I have condemned, to cumber this paper with the therapeutic action of each agent employed, or my views of the *modus operandi* of the cure. Of this fact I am assured, that when I employed emetics, purgatives and the lancet, my patients lingered, suffered, and often died—now they recover.

*Southern Journal.*

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#### PREMATURE LABOR INDUCED BY THE WATER DOUCHE.

By Dr. Hardy.

CASE.—A lady, *æt.* 27, whose first accouchement was tedious and severe, complicated with convulsions, and terminated by the crotchet, was placed under Dr. Hardy's care for her second confinement. In June 1853, her second labor took place; this was of thirty-two hours' duration, and attended with alarming symptoms, which called for immediate interference. It was terminated, as her first, by perforator and crotchet.

On the approach of her third confinement, Dr. Hardy was again engaged to attend her.

"From particular enquiry I learned the time, which she seemed to know with great accuracy, when the seventh month would terminate; accordingly, on the 30th of December last, which was ten days later than the end of the seventh month, I directed a stream of tepid water against the *os uteri*, and confined the water by means of my right hand, which directed the pipe of the instrument, until I had fully distended the vagina; this was continued for about five minutes, the water being allowed occasionally to flow out of the vagina. The operation was twice repeated on this day; after the third time pains were felt in the back, like the setting in of labor; but they subsided as the patient went to bed, and slept well. Next morning the douche was repeated, when the *os uteri* felt more open than on the previous day; it was soft and dilatable; the head was felt through the anterior portion of the uterine wall, pressing on the cervix, and the foetal heart was heard beating strongly. After the fifth douche, which was given at about three o'clock in the afternoon, I was able to feel a portion of membrane protruding through the *os*.

"On visiting the patient again, at nine o'clock, P. M. I was

informed that shortly after the douche she had a rigor, and there was some sanious discharge, which merely stained a napkin.

"As the os did not feel more open than when last examined, and there was no pain, I gave the sixth douche, the only one that gave rise to real uneasiness, and this only during the time the vagina was fully distended.

"I was sent for between one and two o'clock, A. M. and on reaching the patient at ten minutes past two o'clock I found the os uteri fully dilated (the labor, which was exceedingly easy, having set in at a little after twelve o'clock,) and the membranes protruding to nearly the os externum; but instead of touching the head, which had been distinctly felt before, I now discovered an extremity floating in the liquor amnii. In about five minutes the membranes ruptured with a pain, and the presentation was found to be the feet. The contracted state of the pelvis now became very evident as the body of the child advanced; great difficulty was experienced in getting down the arms, and the head, which came with the face towards the left side of the pelvis, required very considerable force to make it pass the contracted brim; when this was accomplished, all difficulty was over, and delivery was completed with the utmost facility.

"Contrary to my expectation, the child's heart had not ceased to pulsate; I therefore resorted to the usual means for resuscitation, and so far succeeded that several attempts were made to cry; but there had evidently been too much injury inflicted in its passage through the narrow brim, so it gradually became more feeble, and died in little more than an hour after its birth. It is only necessary to compare the present with the two former labors of this patient, to be convinced of the utility of induction in her case; the first was upwards of sixty hours' duration, the second thirty-two, and the last not quite two, and during these two hours very easy, till the shoulders and head were passing."

"In resorting to the douche for inducing labor in the case now detailed," Dr. Hardy continues, "I constructed a very simple instrument, on Dr. Kiwisch's plan, consisting of a large garden watering pot, to which a tube of an inch in diameter at its under part was attached. From this tube an India rubber one, of nearly the same diameter, was fastened, and to it a stop cock, which had a gum elastic tube for passing up to the os uteri. From a vessel so large, and suspended at about ten feet from the ground, I expected to have obtained very considerable force, but a trial of it convinced me that it was deficient, as the stream of water was quite too feeble to

distend the vagina; nor did it come against the os uteri with what I considered sufficient impetus to hasten dilatation; consequently, I laid it aside, and adopted Dr. Sinclair's syphon, which answered the purpose to my entire satisfaction, both in forcing a strong continuous stream against the os, and in distending the vagina to its fullest extent. There was only one thing in the instrument that I found might be made more convenient, and that was the conveyance pipe, which, being fixed to the instrument firmly, was occasionally pulled, to the inconvenience of the operator, by the person who pressed the elastic cylinders. To remedy this, I attached an India rubber tube, which rendered the action of the instrument perfectly convenient, so that the tube in the vagina could be held without interruption against the os in whatever direction was found most likely to cause dilatation.

"It has been remarked that, after the third douche was given, pains came on like the setting in of labor, but subsided on the patient going to sleep, and did not return until the next day. I am of opinion, that if the douche had been again applied within a few hours after the setting in of these pains, in all probability four applications would have been sufficient. However, as a good night's rest was of importance, and all went on favorably both during the very short labor that followed, as well as during the convalescence up to the present period (this is the sixth day, and the patient has not had an unfavorable symptom, her pulse never was above the natural standard, and the uterine tumor subsided as rapidly as an ordinary labor,) there is nothing to be regretted in having to give six instead of four douches.

*Dublin Quarterly Jour. of Med.*

## BIBLIOGRAPHICAL NOTICES.

*Yellow Fever, considered in its Historical, Pathological, Etiological and Therapeutical Relations, including a Sketch of the Disease as it has occurred in Philadelphia from 1699 to 1854—with an Examination of the Connections between it and the Fevers known under the same name in other parts of Temperate, as well as in Tropical Regions.* By R. LA ROCHE, M. D. Member of the American Philosophical Society; of the American Medical Association; Fellow of the College of Physicians of Philadelphia; Corresponding Member of the Imperial Academy of Medicine, and Foreign Associate of the Medical Society of Emulation of Paris; of the Academies of Sciences of Turin, Copenhagen, Stockholm, Nancy and New Orleans; of the Medical Societies of Naples, Marseilles, Lyons, etc. Philadelphia: Blanchard & Lea, 1855. 8vo. 2 vols. pp. 1472.

To a majority of our readers, yellow fever is at present a subject of absorbing interest. Having recently prevailed with appalling mortality in our own state, everything connected with its history, its pathology, etiology and therapeutics, will engage attention.

We deem it fortunate that the splendid work of Dr. La Roche should have been issued from the press at this particular time. The want of a reliable digest of all that is known in relation to this frightful malady, has been long felt—a want very satisfactorily met in the work before us. But our author has not confined himself simply to a presentation of the phenomena presented by the disease. He enters fully into the consideration of those deductions from the ascertained facts which have elicited a wide range of discussion and great diversity of opinion.

In the performance of the task, Dr. La Roche has brought to bear evidences of great industry and research. In the discussion of the subjects presented, he displays a degree of fairness and logical power which will carry with him, to his own conclusions, the great mass of his readers.

In commending to our readers a work which we are satisfied will at once be admitted as standard authority on the subject of which it treats, space as well as justice to the author will limit us to but little else than a brief synopsis of the table of contents.

The work commences with "preliminary observations," including the medical topography, climate and population of

the city of Philadelphia, together with a history of the epidemics which have prevailed in that locality since the year 1699. From these, instructive inferences may be drawn as to the habitudes of the disease. The first sixteen chapters, embracing three hundred and eighty-three pages, are devoted to the medical history, altitudinal and geographical ranges, classification and symptomatology of yellow fever—and the remainder of volume I, to its pathological anatomy, prognosis and diagnosis. Six hundred pages of volume II are devoted to the etiology of the disease. Here we find the theories of causation and propagation, contagion and noncontagion, discussed in a masterly manner.

We have forbore to give any indications as to the views of our author on the points discussed, by reason of the want of space to do justice to the subjects.

We deem it but faint praise to say that Dr. La Roche has succeeded in presenting the profession with an able and complete monograph—one which will find its way into every well ordered library.

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*Elements of Medicine: a Compendious View of Pathology and Therapeutics; or the History and Treatment of Diseases.* By SAMUEL HENRY DICKSON, M. D. L. L. D. Professor of the Institutes and Practice of Physic in the Medical College of the State of South Carolina. 8 vo. pp. 752, 1855. Blanchard & Lea, Philadelphia.

We recollect to have been particularly pleased with a report on the "blending and conversion of types in fevers," made by Dr. Dickson to the American medical association several years since. We were thus prepared to look with respect and favor upon anything coming from the same source. We have risen from an examination of the present volume without any diminution of interest in our author.

The volume before us does not claim to be a systematic treatise on practical medicine—and all that could be expected of a compendium of pathology and therapeutics is a fair presentation and discussion of general elementary principles. We think Dr. D. has not fallen short of his aim. While doubtless his positions would be controverted by some, and especially on the etiology of disease, yet it will be conceded that his doctrines are in general in accordance with well established facts.

His style is plain and perspicuous—free from all effort at novelty or eccentricity—and with no allay of personal vanity.

We have been most interested in his chapter on the types of fever, from which we make the following quotation. Our author recognizes the following different types :

“ I. The *Periodical*: Intermittents and remittents generally.

“ II. The *Continued*: comprising 1, yellow fever ; 2, typhous fever, typhoid and true typhous, the epidemic fever of Great Britain, simple fever or ephemera, relapsing fever of Jenner ; 3, catarrhal fever, influenza ; 4, pneumonia typhoides, spotted fever ?


“ III. The *Exanthematous* : 1, variola ; 2, measles ; 3, scarlatina ; 3, erysipelas ; 5 dengue, etc.

“ I am persuaded, he says, that the truth will be found, on examination, in the following propositions: A. That each type of fever is the result of a definite cause, revellent in its properties, character and modes of action to the effects produced. B. That these causes, varying greatly in nature, must be sometimes similar, and sometimes contrasted—that is, they must vary greatly in the character of their efficiency. C. That causes of different kinds or nature may sometimes coexist. D. That when they resemble each other their effects or influences are readily blended, and mingled, and interchanged, as one or the other may predominate. E. That when dissimilar causes coexist they may sometimes act together, but not often—may sometimes blend their influences, but not readily or freely that they may possibly supersede each other by substitution ; but that in no instance can the effect of one cause be the effect of any other cause. This sort of transformation, the only true conversion in the logical sense, is a rational impossibility, whether we regard diseases materially and ontologically as entities, or pathologically and dynamically as mere affections of the organism, arising out of precedent impressions, or from causative agencies.

“ The coexistence of maladies of the same and even of different classes, though once pronounced, according to Hunter’s unguarded and unfounded maxim, an anomaly in nature, and even now thought by many to be a rare phenomenon, is of quite as frequent occurrence as circumstances admit—that is to say, there seems nothing in the nature of things generally to forbid it. We cannot now venture to affirm that there is anything protective or exclusive resulting from the presence of one disease in the system, that shall secure it against the invasion of others to which it is exposed. That certain conditions of the body or its parts, are incompatible and cannot concur, does indeed seem probable theoretically, but cannot be fairly proved. The records of medicine abound with histories of concurrent disease of very great variety.

"I need offer no proof of the frequent blending of the types connate in cause and analogous in symptoms. As to the periodical fevers, regarding the mass of subjects, we shall find at the same time, in the same locality, and exposed to the same causative agencies, cases of intermittent and remittent, and congestive fevers of every form and grade. In the same individual a simple intermittent shall be followed by a 'malignant,' 'pernicious,' or 'congestive' paroxysm, which, if not fatal, will subside into an ordinary remittent promiscuously interchanging. Perhaps the strongest and most marked evidences of these interesting phenomena are found in the histories of African fevers, given by Burnet, Pym, Bryson, McWilliam, and others. An absolute confusion of grade and violence seems to reign. In the same settlement, the endemic fever perennially existing will suddenly become epidemic, pestilential, from simply changing to congestive, pernicious, malignant, vehemently destructive. In the same ship, under the same exposure and general conditions, some will be seized with a mild intermittent, and others with the most terrible and promptly fatal remittents.

"The similar interfusion of the continued fevers, speaking first of the cases in mass, is as easily exhibited, nay, unless we are prepared to set aside the authority of the greater number of those who have in all countries and climates, and at all periods treated of these fevers, we shall be forced to admit the difficulty of finding them separate in nature, and keeping them apart in description. I am not prepared to follow a course so harshly critical. I do not object to the nicest diagnosis, the drawing of the most delicate and precise lines of distinction. I applaud rather all attempts in this way, and study with pleasure as well as profit, the essays of Copland, Gerhard, Jackson, Ware and Jenner. But even in these ingenious and useful efforts at analysis, these vivid delineations of differences, we are perpetually presented with striking analogies, striking resemblances, the intrusion of characteristic symptoms, where they were not looked for, and their absence where they were confidently expected. The synocha and synochus, the typhus and typhoid run together inexplicably. Partisan advocates of special doctrines often find no reply available, but a denial of some alleged fact as a suggestion either of error or carelessness in observation. The impartial judge, the earnest student, is not satisfied, however, with this mode of conducting the investigation; and in summing up for the purpose of arriving at the truth, feels himself under the necessity of regarding with equal eye, and weighing with the same scales the statements on both sides of the question—accepting no 'foregone conclusion.'"



THE

# STETHOSCOPE.

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ORIGINAL ARTICLES.

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## **An interesting Case in Practice.**

BY A. S. HELMICK, M. D. PRINCE EDWARD COUNTY, VIRGINIA.

On the 21st of October 1854, I was called to see a negro woman about twenty years of age, who had never had any children. The following statement was received from her mistress. About six weeks previously, she fell from a wagon loaded with tops of fodder, and in a few days thereafter ran for several hours over a large corn field after some hogs, frequently wading a creek while very warm, her monthly courses being on her at the time.

From that time she complained of her back and bottom of her bowels, a dragging sensation in the pelvis, and a difficulty in voiding urine and fœces. These symptoms gradually became worse, until she was expected to die, and I was sent for.

I found her with nausea and an irritable stomach; severe pain in the small of her back; considerable tenderness over the region of the uterus; a distressing dragging sensation in the pelvis whenever she attempted to walk; pain along the inside of the thighs; a mucous discharge from the vagina; bowels costive; no appetite; hot skin; pulse 120; tongue furred.

An examination per vaginum revealed the womb low in the vagina, somewhat enlarged, hot and throbbing.

I gave a mercurial purgative, and ordered diuretics to be given pretty freely.

October 22.—There is no abatement of the symptoms to-day. I took  $\frac{3}{4}$  x of blood from her loins by cups; ordered hop fomentations to her bowels, and cold injections of slippery elm water per vaginum and rectum, often repeated, and one of the following pills three times per day:  $\mathcal{R}$  Calomel, grs. xxiv; opium, grs. iv. Make 12 pills. The diuretics to be continued.

October 24.—Pains in back and bowels are less severe; less difficulty in urinating; gums slightly tender; complains of pain in the stomach. Continued same treatment.

October 27.—Still complaining of pain in stomach; other symptoms still improving. Applied a blistering plaster to stomach and lower bowels. Gums more tender.

October 29.—Completely under the influence of mercury. The pain in the region of the womb has considerably abated. Urine natural, and voided without pain. One of the calomel pills every third day.

November 8.—Appetite better; pulse more natural; bowels costive, which has been the case from the beginning, but were kept as soluble as possible by aperients. Had quit the use of the pills.

I made a vaginal examination, and found the womb still enlarged, hot and throbbing. Ordered a blister to be constantly kept running, either upon the loins, or over the pubis.

November 14.—The patient has been menstruating for some three or four days; this has caused an aggravation of all the symptoms. The mercurial pills were again resumed; determined to give them a longer trial. She was kept gently salivated, and the blisters running until December 2d, when she appeared much improved; all pains and suffering less; strength increased; can walk about the house with little discomfort; appetite good; bowels regular; pulse soft; tongue moist. Continue same treatment.

December 8.—The patient has been removed from the quarter to the house of her mistress. She had to ascend a steep and high pair of steps. This act made her worse. She was again thrown into fever, with an aggravation of all the other symptoms. She said as she ascended the last step, she felt something give way in the lower part of her bowels. I again examined her per vaginum, and found the womb low in the vagina, about two inches from the vulva. The blisters had been neglected. Gums were still slightly tender. I had her placed upon her back, with her hips elevated; and ordered the blisters again to be applied; and continued the calomel pill every third day. This was persevered in until the 27th, when there appeared to be no improvement in her case; and believing that I had given the mercurial treatment a fair trial—instead of the patient being better, was getting worse—not able to sit up—I determined to pursue a different course. I cupped her over the pubis, and ordered, after the salivation had disappeared, a half grain of tartarized antimony three times per day.

January 5, 1855.—No material change since last visit. I again scarified and cupped her over the pubis. The dejections from the bowels are considerably mixed with mucus, and exceedingly offensive. During this month the patient was treated with the tar. an. blisters, cupping, injections, &c. and seemed to improve at times. For several days there would be a suspension of all the inflammatory symptoms. Then again she would seem to take cold, and all the symptoms would become worse. The tartarized an. kept the fever and other general symptoms less while she was under its influence, but enfeebled her, and she became more emaciated every day.

February 3.—The tartar emetic had been discontinued three or four days past. The symptoms having assumed their worst form, I made another vaginal examination, and found the uterus still low in the pelvis, very much enlarged and exceedingly tender to the touch. I tried to introduce the speculum, but the vagina, at its external orifice, was so small

and so very tender that it was next to impossible for me to succeed. I then introduced the index finger of the left hand, and took a long sharp pointed bistoury and introduced it with the edge next my finger, and scarified the womb in several directions. This caused scarcely any pain, though the cervix was exquisitely tender, especially immediately at the os.

I put her next upon the use of the iodide of iron. Changed her diet—instead of an antiphlogistic regimen, allowed her nourishing broths, beef and mutton chops, lean ham, &c. This course was pursued up to the 24th, when I again saw her. She was able to walk about the house. Had an excellent appetite; there was not as much tenderness about the cervix; in fact, all the symptoms seemed to be somewhat improving. I ordered the iodide of iron continued, and given regularly; blisters to be kept to the loins, alternated to the pubis and inside of the thighs; her bowels kept soluble by aperients, and diuretics given when required.

I did not see the patient any more until

April 3d.—I was then called in the night to see her, as was supposed, in a spell of colic. On my arrival I learned that she had been suffering with violent attacks of pain in her bowels for near a fortnight, which was believed to be mere attacks of colic. I examined her and found that she was laboring under the worst form of peritonitis. Had high fever; quick pulse; hot skin; abdomen very tender at all points, and tympanitic. I saw at once that the entire peritoneum was highly inflamed, and it was quite certain that she would succumb. I immediately began with the calomel and opium, in large doses, and had a blistering plaster applied to the entire abdomen; her strength was too far spent to allow venesection.

Next morning (April 4th) I found her still suffering with pains; countenance pinched and cadaverous. I pushed the remedies, and got her under the influence of mercury as soon as possible; but by the time the gums became slightly tender, the disease had assumed its most aggravated form; was speechless; eyes deep in their sockets, and seemed to be set.

I did not expect her to live from one hour to another; but my motto is, "nil desperandum" while there is breath, even in seemingly hopeless cases. I still persevered; sprinkled calomel over the blistered surface, and rubbed mercurial ointment upon the inside of the thighs, and under the arms. She gradually improved, and by the time she got entirely under the influence of the calomel, her sufferings had considerably abated; countenance more natural; spirits revived; talks cheerfully.

I continued to visit her every day, keeping her salivated, and meeting the worst symptoms as they appeared. She seemed to improve up to the 15th, when the tenderness increased; the countenance resumed its expression of anxiety and suffering. I had the blistering plaster reapplied, and used spirits of turpentine internally, as the tongue presented a typhoid appearance; gave wine. In spite of everything that I could do she gradually sank, and on the 24th expired.

A post mortem examination was made 18 hours after death, assisted by Dr. C. S. Biglow. The body was found in an extreme state of emaciation; mammary gland very much enlarged; abdomen full. On laying open the chest and abdomen, the entire thoracic and abdominal viscera were found in one adhesive mass. The right lung was slightly hepatized, and both were grown to the walls of the chest. The pericardium was firmly attached to the heart and walls of the chest also. In fact, all the contents of the chest were adhered together, wherever they came in contact. The heart in other respects was normal. The walls of the abdomen had to be dissected off the intestines, which also lay in one solid body, with here and there a collection of about a tablespoonful of pus. The stomach did not show much sign of disease. The spleen somewhat enlarged; liver enlarged and fatty; kidneys considerably enlarged, and softer than natural; bladder distended with urine; bladder much diseased; the walls were considerably thickened; the mucous coat very dark, and showed signs of softening; the mesenteric glands enlarged, and some in a softening condition. The womb was found

filling the entire pelvic cavity. Its walls were thin in places, but most generally thickened. There was about a half pint or more fluid within its cavity. This fluid was clear, with small pieces of brain-like consistency mixed up with it. There was also a tubercular or encephaloid deposit upon its entire mucous coat. This was attached or deposited very roughly and irregularly. At some places it was only about half an inch thick—at others, an inch or more. The entire surface was very uneven and ragged. There were thrown out fungoid excrescences or protuberances from one to two inches long, and from half to an inch thick. The deposit was firmly attached to the uterine walls, which seemed to be an extension or a thickening of the mucous coat. The cervix was elongated and enlarged; when cut into presented a condensed and glossy appearance, but had none of the above described deposit. The rectum contained the same kind of deposition almost throughout its whole length, and was sloughed through in two or three places. The deposition was of a white appearance, and had the consistency of brain.

#### REMARKS.

The points of interest in the foregoing communication are very striking:

1. The patient was a sound, healthy, athletic woman; never had a day's sickness in her life before this attack; free from all scrofulous and other constitutional taints.

2. The great obstinacy of the disease; its apparent amendments and frequent relapses, from no appreciable cause.

3. The exceedingly offensive discharge from the rectum, while that from the womb had nothing peculiar about it. In fact, during the greater portion of the time there was no discharge noticed.

4. The universal inflammatory action that pervaded the entire serous membranes examined, &c.

5. The tubercular deposition upon the mucous coat of the uterus and rectum.

This truly is of deep interest to me, having never seen anything of the kind before, or even noticed by any author of the diseases of females, or in any journal that I have access to. I feel somewhat at a loss to diagnose the case. Was it merely an abnormal deposition, caused by the long inflammatory action? If so, why was it upon the mucous coat of the rectum also? It did not show any rational signs of disease, except the offensive evacuations during the patient's illness; or could it have been an encephaloid or hæmatoid variety of cancer?

Professor Simpson says, when this disease (encephaloid or hæmatoid cancer) attacks the cavity, body or fundus of the uterus, it may appear under different types or forms. When the first variety of this disease, which he has had occasion to observe attacks the cavity of the uterus, it presents the form of an irregular, flat or roundish fungoid excrescence attached by a broad basis to a greater or less extent of the interior of the organ.

There has been so many different descriptions of cancer given by those writing upon the subject—and so vague, indeed, is the sense in which the term cancer is sometimes applied, that it is quite impossible to recognize the complaint from their descriptions.

I have endeavored to give as concise and succinct an account of the case above, its history, treatment, symptoms, autopsy, &c. as could possibly have been done in this paper. Truly, I have left out many interesting points; but a minute description of all would have spun out this communication to an unnecessary and objectionable length.

I leave the profession to judge for themselves, and give it what name they may think it deserves, if it deserve any name at all.

## Epidemic Asthenia.

BY A. T. FOSTER, M. D. CHURCHLAND, NORFOLK COUNTY.

During the spring months of 1854, a change came over the general aspect of diseases in this neighborhood, which may be succinctly noted, by stating that they assumed a more asthenic character. In the fall of that year, several cases of well marked typhoid fever presented themselves, and typhoid symptoms were to be observed, from time to time, mingling with those belonging to our bilious and intermittent fevers.

The inflammatory affections of the past winter and spring were less open than usual; and, while still complicated, to a considerable extent, with manifestations of malarious influence, showed a greater amount of enteric than of hepatic derangement.

From the middle of May of this year, onward until towards the last of June, cases of typhoid fever—dothinen-teritis—formed a prominent portion of the sickness demanding medical aid. And it is worthy of notice, that the majority of these cases occurred on the western or Nansemond river side of our range of practice—this range extending over a peninsula, bounded on the north by Hampton Roads, on the west by Nansemond river, and on the east by the western branch of Elizabeth river, which latter is distant from Churchland, in a direct line, about two miles, and across which, continuing the same direct line, a little to the south of east, three miles more would take us to the city of Norfolk. Of course, these are only approximations as to direction and distance. As before stated, the majority of the typhoid fever cases occurred on or near to Nansemond river.

Since the outbreak of the yellow fever in Norfolk and Portsmouth, this vicinity has been crowded with refugees from those unfortunate cities, most of whom have been uncomfortably located, and have felt the full force of unaccustomed exposure to malarious influence. Apart, however, from the additional cases thus thrown among us, remittent

and intermittent fevers have been rife and violent, and malignant fevers uncommonly numerous and severe.

Within the last four months, four peculiarities in our fevers have prominently engaged our attention.

First—the disposition to relapse, both in intermittent and remittent fevers. There are very few individuals who have suffered an attack, who have not again and again been seized.

Secondly—The unwonted impotence of quininism to restore the patient speedily to health. We have seen this induced in case after case, when there was nothing to indicate any phlegmasia, and yet the disease has run its course. In the vast majority of cases, however, the fever, in the ordinary acceptation of the term, has been cut down, but the debility remained. So common a circumstance was this, that at one time we feared that quinine produced the prostration; and it was only by withholding quinine in some instances, and watching the result of similar cases, treated side by side with and without quinine, that we reached the conclusion of the debility being a component of the disease.

Thirdly—The fact that parturition, during a fever at all grave in its nature, was almost invariably fatal.

Fourthly—The substratum of debility, which, pervading all cases of fever, often manifested itself as a solitary symptom. It has not been at all uncommon to see individuals, who, with no other apparent functional or organic disorder, would present a pulse, scarcely to be felt, at the wrist, and beating as low as fifty to the minute, but quickened and irregular upon the least exertion.

Thus far, we have narrated facts. Upon these facts we are disposed to found an opinion. Towards Nansemond river there was typhoid fever, and, while typhoid symptoms were often mingled with our other cases, still debility was the striking characteristic of our sickness, and this was more perceptible the nearer we approached Norfolk. Was not the fever in the sister cities rendered unprecedentedly severe and fatal from the prevalence of an epidemic asthenic influence? And were not the overshadowing wings of the same tendency

hovering above us? The impression left upon our memory—for we took no written note of the state of the weather—is, that our sickness increased with easterly winds. While yellow fever—a disease of cities and localities crowded with human beings—prevailed in Norfolk and Portsmouth, there was an epidemic cause, added to the fever, which arrayed it with its garb of terror, and caused many to question whether it was not something even more deadly than yellow fever, the withering blight of the same pestilence extended to us, and its breathings fanned our autumnal fevers into a fiercer flame than would have been kindled by malarious influences alone.

Our first impression was, that typhoid fever was mingled with our malarious diseases; and this, doubtless, was often the case towards the Nansemond river; but further observation showed that this speculation was incorrect in the large majority of instances. The absence of enteric symptoms, of tympanitis, and of the eruption of typhoid fever; and the striking peculiarity of the debility—resembling, and yet differing from, the sedation of quinine—convinced us that we were combatting an unfamiliar enemy.

This much is certain—our diseases have been marked by extreme debility. The tendency to relapse, the continued prostration, and the fatality among parturient women, may all be explained on this presumption—these being utterly overwhelmed, by the usual loss of blood during and after labor, and by the exhaustion consequent upon the pains, being added to the already existing weakness.

The practice based upon this supposition has been eminently successful. It consisted in the free use of aqua camphoræ, ammoniæ carbonas, brandy and opium, in addition to such treatment as general indications demanded.

As a sequel to our fever cases, we have witnessed, in a number of instances, a hæmorrhagic tendency, of a passive character, and unaccompanied by relief to any remaining symptoms, but on the contrary, existing as an unalloyed evil. Complicated as it often was with functional and even organic

derangements, which demanded the use of mercurials, we have often trembled lest the stimulants we used should fail to sustain the flagging powers of vitality until the desired change could be effected—a change which, alas! in some instances, came not at all, or came too late.

Accustomed for years to witness the manifestations of malaria; taught, by long experience, to watch for the slightest ripple upon the surface which might mark the underworkings of miasmatic influence; having, earnestly and industriously, endeavored, in the Pennsylvania hospital, to stamp upon our memory the impress of the face and form of enteric and typhoid fevers; still, there has been something unusual—unfamiliar—in the general aspect of our fevers, and which is best expressed by the word *asthenia*. In this opinion we are sustained by our friend Dr. J. T. Kilby of Suffolk, who has had ample opportunities of studying the appearance of miasmatic diseases in the country around Suffolk, and whose attendance in the hospitals of Paris has given him every advantage in forming an intimate acquaintance with typhous and typhoid fevers, and who, coming to our relief when we were worn down by the fatigue and exposure of an overcrowded practice, has shared our labors and observations during the last four months.

Whether this view of the subject may or may not strike the minds of our brother physicians with the same force that it does ours, matters but little. It is, nevertheless, worthy of record that, during the prevalence of a disease in Norfolk and Portsmouth, which is almost without a parallel in the annals of fatal pestilences, a change should have come over the character of miasmatic fevers in the vicinity, and that this change should be marked by an all pervading debility; and further, that this asthenic tendency should have been, in that vicinity, a thing of gradual accession, accompanied, in its first appearance, by enteric fever, which it outlived, and with which it seemed to claim no special affinity.

**Retention of Urine caused by Stricture---Relieved by  
cutting through the Constricted Portion of  
the Urethra.**

BY GEORGE C. STARKE, M. D. OF HICKS FORD, VA.

The patient, 60 years old, of good constitution, consulted me for violent cramps in the lower part of the abdomen. Examining carefully all the symptoms which he presented, it was evident that his complaint was more serious than he had imagined. His pulse was small and quick, skin dry, anxious expression of countenance, bowels constipated habitually, and had passed no urine for 10 hours. Above the pubis, the bladder formed a large tumor about the size of the two fists—tense and resisting when pressed upon; very flat sound elicited by percussion.

Thirty years previous to this difficulty, contracted gonorrhœa, which required some months for cure, and after that inflammation of the canal, noticed that the stream of urine did not pass so clearly from the meatus, and gradually became twisted in its course, falling but a short distance from his feet, notwithstanding considerable efforts to expel it.

He was told by a surgeon that there was a stricture of the urethra, and instruments were requisite to cure him. Bougies were introduced a few times, and the old man abandoned without being much benefited.

Having resorted to the usual means for overcoming difficulties to the passage of urine, without success, (and let me say in this place, being on board a Liverpool packet, there were not the conveniences to be had which were desired,) the catheter was the next means which promised relief. I do not think, as a general rule, the catheter should be employed until the warm bath, poultices, &c. have been well tried. Opium not being prompt enough, was not considered, and having no assistance, did not wish to administer chloroform.

A medium sized catheter was used, but its point was arrested about two and a half or three inches from the meatus by a firm, resisting tissue, which yielded not.

Externally, at the narrowed point of the canal, the urethra could be felt in form of a nodulated cord, which receded when any force was exerted by the instrument, instead of permitting it to enter the constriction.

The smallest catheters were then used, but with no better success. The attempt to introduce instruments created new desires to urinate, and the patient's situation became somewhat alarming. The pulse was quicker, respiration hurried, perspiration standing in drops on the forehead, and the efforts of the bladder to free itself of its contents were very painful. Taking the smallest probe in my possession, it was passed in to the stricture and firmly held in contact with it for several minutes, when it was felt to penetrate slowly, communicating to the fingers a grating sensation as it proceeded through the indurated tissue. It finally reached the sound canal, and urine of a turbid, ammoniacal nature escaped by the probe in a small stream, and continued to run for half an hour. At the expiration of that time the symptoms were relieved, the bladder no longer formed the tumor already spoken of, and the patient was comfortable. Large poultices were applied over the lower portion of the abdomen and genital organs. Two hours afterwards, the patient again felt inclinations to urinate, and urine came from him by drops when he strained greatly. I succeeded in introducing a small gum catheter and drew off the urine, but when removing the instrument, the patient shivered as if he had an ague, and this shivering was repeated several times. He took an opiate, and had the poultices applied through the night—rested well.

The following morning the penis was much swollen from the attempts at catheterism, and it was perfectly impossible to introduce an instrument of any kind. The symptoms of retention had again appeared, and the patient was in agony. To wait longer in the hope that the urine might be taken away as in the first instance, valuable time would have been lost, and the chances for success of an operation greatly diminished.

Having concluded to operate, the question then was, which

operation should be selected—puncture of the bladder through the rectum—through the perinæum—puncture above the pubis—or operating on the stricture itself by an external incision.

M. Malgaigne, in his lectures on this subject, recommends warmly the operation above the pubis. The patient may be kept upon his back, and if the passage be cleared of obstructions, the wound is in a situation more favorable to healing than if it were in the perinæum or through the rectum. If a fistula is the consequence of the operation, which is very frequently the case, it is more convenient to have it above the pubis, where the urine cannot escape at all times, than to have the wound in the perinæum or rectum, with a continued dribbling of urine.

The disadvantages of cutting down to the stricture almost deterred me from even the thought of it. The probability of other strictures, deep seated, to retain the urine after one obstruction had been overcome—an unsightly wound remaining—the patient's spirits depressed by a failure to relieve him—and the necessity of another operation—puncture of the bladder.

The patient was informed of his situation, the importance of prompt measures for his relief explained, and the consequences, which might follow the operation, laid before him.

He consented to any operation which I preferred. After examining carefully the corpus spongiosum posterior to the stricture, when violent involuntary efforts at micturition were made, my impression was that the canal was somewhat enlarged, and that a stream of urine arrived at the stricture, flowing backwards so soon as the contraction of the bladder ceased. Relying upon the correctness of this opinion, I determined to operate on the stricture itself, hoping to pass the same catheter, when this barrier was removed, that was introduced the day before.

A large sound was passed in to the stricture, and for want of an assistant, was given to the patient—drawing the prepuce over the glans, and with the left hand making tense the

skin and subjacent tissues, I made, over the seat of constriction, an incision one inch long, dividing the skin and cellular tissue—the next incision was about half the length of the first, being almost upon the modular tissue forming the stricture.

Here was the most difficult part of the operation—hæmorrhage was abundant—the hard cord would slip from under the knife, and some five minutes elapsed before it was divided. When freely opened, there escaped a thick greyish semifluid mass, ammoniacal and very offensive; then came urine, highly colored, in a full stream. To prevent infiltration of the walls of the wound, a catheter was immediately introduced, and all the urine drawn off. Those who have seen persons with retention only can know the relief afforded. The pain was no more felt, and the patient's anxiety was over. In fifteen minutes violent shivering came on, and apprehending future trouble, gave large doses of opium and quinine through the evening and night. Hæmorrhage was checked by cold water applications. Catheter left in the canal.

He passed the night well, and had no fever the next day. The wound was red and much irritated by the urine escaping by the catheter.

The bowels were moved by a gentle cathartic; quinine continued, and low diet advised. Not one unpleasant symptom arose, and the patient, though promising me to remain in New York until the wound cicatrized, felt so well in ten days that he could not be prevailed upon to enter the hospital, but proceeded on his way to Wisconsin as soon as the ship arrived at the wharf.

I should have attempted an operation for closing the fistula while on the ship, but there were no serres-fines on board, and I objected to the use of sutures; besides, time was not sufficient, before the arrival of the ship, for the cicatrization to be completed, and the exercise he would have taken on landing might have broken out the sutures and spoiled the flap which was to cover the fistula.

It was my intention to perform the operation recommended

by M. Nelaton, which is simple and generally successful. Remove a part of the skin on one side of the wound; make a flap from the opposite side, partially dissecting it up, slide it over the wound and keep it in place by serres-fines; a little beyond the ends of the incisions made for getting the flap, make another incision (semicircular) to relieve the tension, and favor the circulation in the flap. In this operation everything is favorable for cicatrization—the flap is not on the stretch, and its free edge lies in contact with a surface just deprived of skin.

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### Dr. Dowler and the Etiology of Yellow Fever.

MESSRS. EDITORS—As we have, in the October No. of the Stethoscope, Dowler upon Riddell, we propose giving you now a little of Dorset upon Dowler.

We have carefully and studiously read his learned and elaborate essay touching the etiology of yellow fever, but on analyzing it and comparing one portion of it with another, we found ourselves utterly incapable of harmonizing the incongruous materials of which it is composed, or of educing therefrom one single original and practical lesson. The only language that rang in our ears on rising from our attentive perusal of it was, *no hope!* For according to his allegations, no human efforts can avail anything towards staying the progress of epidemics—no human arm can mitigate their intensity, or throw any barrier in the way of their desolating march—all medication is futile, yea preposterous, for this besom of destruction has swept over the earth, and it will sweep? “The people of New Orleans may exhaust their private fortunes for protection, the government may lavish its millions, sanitary laws may grow into codes, and sanitary officers into standing armies, but New Orleans and all other cities must be visited by epidemics. ‘The pestilence that walketh in darkness and wasteth at noonday,’ will walk and

waste." Very eloquent, but what has it to do with the etiology of yellow fever, so far as throwing any light on the subject is concerned? Standing armies of intelligent sanitary officers, wise hygienical laws and millions of money judiciously managed would, in our humble opinion, greatly enhance the health of that oft afflicted city.

But let us examine his paper, and observe how beautifully one wordy structure is, to use an architectural term, "dove-tailed" into another. He boldly affirms that "every product, whether solid, fluid, or æriform, or imponderable, whether resulting from the decomposition of animal, vegetable or mineral matter, produces effects which are remarkably uniform." Every observant medical philosopher knows that this assertion is false, and that there is comparatively little *uniformity* in the products of these agents, owing to the great diversity of *modifying* circumstances that influence their action, and that it directly conflicts with the well known and well recognized law, that "the *same* cause acting on different subjects must produce *different* effects."

Again—he says, "they do not discriminate between the acclimated and unacclimated, nor are they (their) noxious or innocuous properties at all modified by such circumstances." What facts has he adduced to elucidate and establish the correctness of this hypothesis? What arguments does he use to make it appear even plausible? If, as he asserts, "the effects (of all agents prejudicial to health) are uniform in all climates," why does he use the following language? "I am far from considering New Orleans an unhealthy city, so far as her *resident* and *native* population is concerned." Why does he make a discriminative salubrity of climate as touching the native and unacclimated citizens of New Orleans, if "every product of solid, fluid, æriform or imponderable" element is *uniform*? It is evident that every conceivable variety of morbid agents must be embraced in one of these terms. If the etiology of "febris flava" is traceable neither to *fungi venenati*, to cryptogamic sporules, to the presence or absence of ozone, to the necropolis, or ingredients of our caldron, nor to the

seething canals and basins that boil and bubble, nor to any possible combinations of filthy materials—to nothing that can emanate from ship holds or gutters—to nothing “solid, fluid, æriform or imponderable,” what is there upon the face of the earth or in the air around it, *exclusive* of these things, that can possibly produce yellow fever? Yet he admits that this disease originates in New Orleans, prevails there every summer either in an epidemic or sporadic form, is both importable and transportable, but what constitutes its *punctum saliens*, or what are its *media* of propagation, he does not presume to inform us. If his learned verbiage proves anything, it proves entirely too much for the welfare of his cause. To admit that his positions are valid and tenable, is tantamount to admitting the existence of an effect without a cause, a product without a producer, which “is simply a *reductio ad absurdum*.”

Again—“all toxicology teaches us that all animal, vegetable or mineral poisons not only affect those who never have before been affected by them, but that they will act equally a second, a third, or a twentieth time.” Every practitioner of medicine, who has any brains or learning at all, ought to know that toxicology “teaches” no such absurdity. Every medical philosopher or toxicologist knows that age, sex, habit, pain, disease, idiosyncrasy, and a multiplicity of other causes too numerous to mention, greatly modify the action of “vegetable and mineral poisons,” and cause them to produce varied and multiform results. Every scientific physician knows full well that “all vegetable and mineral poisons” do *not* “act equally a second, a third, or a twentieth time,” independently of every conceivable circumstance; and the refutation of this fallacy saps the very foundation of his theory, (if it may be dignified with such a title,) and upsets his gratuitous assumptions.

We submit the following supposition, by way of illustrating the doctrine that the same cause acting on different systems must produce different effects. Suppose a dozen persons sleep in the open air upon the wet ground, exposed to all the inclemencies of a cold, damp, chilly night. Reasoning from the recorded experience of the medical world, we would

expect to find no two of them affected in every particular precisely alike, although they were all liable to identically the same *causa morbi*. Vaccinate a dozen individuals with the very same scab of *vaccine virus*, or let them be exposed to *variola*, *rubeola*, *scarlatina*, *pertussis* or *parotitis*, and how diversified would be the symptoms presented by them. It is the infinitely various and modifying influences and circumstances connected with physiology, pathology and therapeutics, that prevent the medical science from being reduced to the same degree of accuracy, certainty and perfection which the *exact sciences*, as they are denominated, have attained.

Dr. Dowler ignores all the generally supposed causes of yellow fever, and launches his majestic barque, as splendidly equipped as was Cleopatra's on the Cnydus, upon an unexplored and inexplorable ocean, without chart or compass, but where he will *ultimately* land it is impossible for human tongue to foretell. Go kerflumux into Symes' hole, or somewhere else. He endeavors to annihilate well established positions, in order to get a *point d'appui* for his own, and he has succeeded admirably well—provided we receive all his *ipse dixits* as incontrovertible testimony. But we can say, in the language of Horace, "*Nullius addictus jurare in verba magistri*," which may be translated, "We are not in the habit of swearing to the *ipse dixits* of any master."

We do not believe that any locality, perfectly exempt from great solar heat, humidity and filth of every imaginable kind, ever gave origin to a single case of yellow fever. We are not fully convinced yet that the disease may not spread as an epidemic from the introduction of a single case into a nasty, dirty, filthy place, surrounded by a foul and highly heated atmosphere—that under such circumstances, "a little leaven may not leaven the whole lump."

We are persuaded that Dr. Dowler has introduced into his essay only such facts as seemed to sustain his preconceived opinions, discarding, perverting or misconstruing all that militated against them. We admit that these statements, as mere opinions of ours, are worth but little in the way of logical

argument, but they are conclusions derived from a large amount of reliable data bearing on the subject under consideration.

Professor Riddell says, "Doubtless the poisonous matter is some form of living organism." Dowler says, "Doubtless the professor is mistaken." Dorset says, "Doubtless Dr. Dowler thinks he has completely demolished the professor and all other writers (versus eum) on the subject, and if so, he hopes that he will build us up a theory in relation to the etiology of la fievre faune less objectionable, more plausible and more reliable than any which has ever yet been promulgated to the world." But is he quite sure that *his* "controversial propensities have not "largely predominated over" his love of the truth? We mean "the *whole* truth, and *nothing* but the truth." While he denounces Professor Riddell's theory as "groundless dogmas," is he fully persuaded in his own mind that he is not himself transcendently dogmatical? Is he not in the slightest degree tainted with that *mania* to which he alludes in the following sentence? "The ground here proposed is, it must be confessed, one beset with extraordinary difficulties, and what is most remarkable in too many of those who have occupied it, is that the mania to do and to discover that which is impossible, has thrown into the shade the great measures of known possibility and practicability." Honest confession. Of course, we would naturally conclude from his sophistical reasoning, that his assumed "ground was beset with extraordinary difficulties." He does not even demonstrate the correctness of his negation, that yellow fever is not produced by morbid elements generated "in our cauldron." Has he anywhere proved to the satisfaction of any body but himself, that noxious vapors and poisonous exhalations in a rarified, attenuated and almost imperceptible form, might not have ascended perpendicularly from the Gormly basin and canal, become condensed in their ascension, been borne off by currents of air, and fallen destructively on places remote from those sink holes of filth and pollution? Or has he shown that those who have long re-

sided on the borders of those filthy places, have not become less susceptible to any morbid impressions from such sources than those who live more remote, and who are only reached by them during the intense heat of summer, when the baneful effluvia are elaborated to an unwonted extent? Just as it requires a much larger amount of alcohol to produce intoxication in the man who lives in the habitual use of it, than in one who rarely touches it. But to all this he may reply, that the rule of debate is *onus probandi incumbit affirmanti*—that he occupies the negative and not the affirmative side of the question, and that it is his peculiar privilege to deny all things and call for the proof. Well, admitting that he is negative, it does not become him to be so positive. He is very pliable—affirmative, negative, positive—“he wires in and he wires out.” He says, “There is not in the whole dictionary a word more suggestive of fearful associations than this word *confidence*,” and yet the burden of his Herculean efforts to *riddle* Prof. Riddell’s theory seems intended to produce “confidence” by proving the innocuousness of those foul and loathsome places, the Gormly canal and basin, in reference to which he uses the following very graphic language. “The appearance of the hot sun after a rain speedily covers the caldron with a deep green mantle, which a few hours of solar action converts into an elevated black foam. As the evaporation goes on, nearly the whole space becomes uncovered; the basin yields up its dead, and the whole necropolis of departed animal and vegetable life lies naked to the rays of the sun.” The fever occurs there under just such circumstances as we would by *a priori* process of reasoning expect to find it. A deduction, fairly and legitimately drawn from his premises is, that he would have everything remain *in statu quo*. He advocates no removal of the horrible filth and stench about the city, no quarantine regulations, the adoption of no preventive measures whatever, either with a view to staying the march of the pestilence or lessening its mortality, through fear, it seems, of encountering that “terrific Gorgon’s head,” oppressive taxation. Here, however, he is consistent with himself, for ac-

according to his doctrine, no sanitary regulations can possibly be invented which will not prove utterly impotent as *prophylactics*, for the disease has prevailed, *ergo* it will prevail, *maugre* any efforts to the contrary. Sound logic that—isn't it? As we before stated, he negatives all the supposed causes of yellow fever—emerges from the perplexing and “extraordinary difficulties” which environ the subject, and “doubtless” with feelings of exultation mentally exclaims, “Eureka”—I have found it. I've got it at last, after having traversed continent, island and ocean—I have reached the *ultima Thule* after a long and tedious voyage. I have discovered a *sine qua non* in the production of this disease. It is owing wholly and solely to the operation of “an inexorable law of accumulated mortality.” Yes, the mountain has brought forth, and lo! a mere *cidolon* is the result of her giant *throes*.

(We intend no disrespect towards Dr. Dowler: we entertain for his talents and learning a very high regard.)

If yellow fever is never attributable to local causes, but wholly ascribable to “an inexorable law of accumulative mortality,” it seems very remarkable that it should occur every summer in New Orleans, while Boston, New York and various other large cities of the Union should enjoy such perfect exemption from its ravages. (We cannot believe that “the tower in Siloam fell” upon the citizens of New Orleans, because “they were sinners above all men that dwelt in” these cities.) But if one case can be produced by local influences, may they not be multiplied to an indefinite extent by the same morbid agencies? If one case of this disease can exist independently of his “inexorable law,” it is evident that two may, and if two can occur without such a causation, a hundred may, and so on *ad infinitum*, which amounts to “nothing shorter” than an epidemic.

We hope the doctor will inform us whether this “accumulative” law originates in the atmosphere, in the earth, or in the human system; and if in the last, why it acts so much more potently upon exotic than upon indigenous systems, and why it remains inoperative and even dormant until the indi-

vidual went to New Orleans. Surely there must be *something* there which excites this curious "law" into action, and thus developes the fatal malady. If the cause of this disease is perfectly intangible, incomprehensible, and beyond all the powers of human analysis, where is his authority for asserting that it is "an inexorable law of accumulative mortality?" However, possibly he may reach it by a process similar to that observed in negative diagnostication. But then he ought to invent two laws, one for *sporadic* and the other for epidemic accumulation. He does not argue according to the rules of the inductive philosophy, constructing a theory out of facts, but according to the hypothetical method of reasoning, falsely at that, starting with hypotheses, and denying the relevancy or pertinency to the theory of all the admitted causes of the fever, because they do not prove auxiliary or inservient to his purpose. He presumes the existence of a law, and then theorizes upon that presumption. But what would become of propositions, if subjected to the rigid tests of the recognized canons of experimental induction, as laid down by such logicians as Richard Whately and John Stuart Mill? Mr. Mill says, in his system of logic, "An hypothesis is any supposition which we make, in order to deduce from it *conclusions in accordance with facts which are known to be real*. Hypotheses are invented to enable the deductive method of reasoning to be earlier applied to phenomena. In order to discover the cause of any phenomena, by the deductive method, the process must consist of three parts—"induction, ratiocination and verification." Has he verified any of his propositions, and demonstrated them to be correct?

That profound thinker and logical reasoner, Sir Isaac Newton, says, "Hypotheses, whether in metaphysics or physics, or mechanics or occult qualities, have no place in experimental philosophy:" that is, they cease to be hypotheses as soon as their correctness or fallacy is made evident by the tests of experimental examination. Has he reduced his hypotheses to the rules of experimental philosophy, and demonstrated the existence of his "occult" law of accumulation?

If not, his theory can have no place in our philosophy. There are more causes of yellow fever in New Orleans than are dreamed of in *your* philosophy, Horatio.

Again—Newton says, “No more causes nor any causes of natural effects ought to be admitted, but such as are both true and sufficient for explaining phenomena.” Is his inexorable law “sufficient” to explain all the phenomena connected with yellow fever? Will he accurately define the origin, nature, extent and influence of this law, that we may judge whether it is capable of accounting for the whole train of morbid phenomena that attend it. Our final question is, will his assumptions, allegations and hypotheses bear the application of that *experimentum crucis* which the foregoing principles of reasoning require, and still appear fortified by all the soundness and immovableness of strictly philosophical and logical argumentation?

He labors hard to convince us that the effects of all poisons are uniform. He deduces from this false premise the conclusion that the fever cannot be produced by any species of poison whatever, because the disease manifests itself differently on different ages, sexes and constitutions.

We cannot conceive of anything in the world better calculated to produce uniformity of action than an inexorable law. We understand by this, one that is irrevocable and infrangible, and one that cannot be rendered nugatory or abortive, or have its influence modified, augmented or diminished by any means within the range of human appliances. The application of all the resources of the “healing art” to a disease caused by such a law would prove but vanity, vexation and disappointment. It would be inequitable for Dr. Dowler to receive any remuneration for his professional services in such a case, for it would be utterly impossible for him to render a *quid pro quo*—return of an equivalent for value received. He could neither restore to health, mitigate the disease nor ameliorate the condition of the sufferer. Hence, *we* conclude that it is not produced by an “inexorable law,” because there are so many grades and types of the disease observable during its preva-

lence. A poison may be defined, an agent incompatible with and destructive to human health, manifesting itself *differently*, according to the amount taken and the different systems upon which it exerts its deleterious power. We therefore reach the conclusion that the etiology of yellow fever *is* traceable to a poison.

We confidently anticipate that Dr. Dowler will be found guilty of an infringement upon his own "inexorable law," when he proceeds to "the consideration of some of the *avoidable* causes of mortality in New Orleans." We advise him to be cautious, lest he be "taxed" for their removal. He says himself, that "they are multifarious—their name is legion."

Most respectfully,

DORSET.

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### EDITORIAL.

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THE legislators of our state are again assembled, in the discharge of the delicate function of revising the statutory provisions of a great and growing commonwealth.

The advocates and champions of its varied interests are in the metropolis, to represent the claims of each, to the end that the complicated machinery of government may run smoothly and equally, and apace with the foremost in the race of human progress.

We make no question of the wisdom or fidelity of those whose business it is to steer the ship of state to each prosperous gale. But there is always danger, and especially under our present contracted terms of legislation, that great projects may overslaugh what are deemed matters of minor importance.

As a state advances in population and other elements of greatness—in the same ratio are the subjects for legislation increased—and the highest practical wisdom consists, not in being governed by precedent or authority, or any abstract principles, but in so shaping the ends of legislation as precisely to meet the existing condition of the country to be governed.

The practical precept of our motto, "Attend to the state of the system and prescribe accordingly," is as important in the business of legislation as in the application of medicinal agents to the remedy of disease.

We desire again to urge attention to a few points loudly calling for judicious legislation.

1. The statute designed to carry out the requirements of the constitution concerning the registration of births, marriages and deaths, is so defective as to be utterly abortive of the objects designed. We have made two efforts to get the returns, that we might present our readers with an analysis, but was assured by the officer of state having them in charge, that they were so partial as to be valueless. It would be a reflection upon the intelligence of the reader to adduce arguments in favor of the importance of this registration.

2. Some effectual and wholesome restriction ought to be placed upon the sale of poisons. The growing frequency of a resort to these for criminal purposes, and the facility of obtaining them, demands the prompt interposition of legislative enactments.

3. We invite attention to the importance of establishing a state hospital and alms-house in the city of Richmond. Almost all the older states and some of the new ones have established institutions of this character in their large cities, for the benefit of the sick and suffering poor. But in Virginia this class of the community is left to the care and compassion of private individuals. This should not be. It is the imperative duty of every state to make some provision for her own sick poor. They are now attended by our physicians, who not only render these services gratuitously, but are taxed for the privilege of attending them. The physicians of Richmond alone annually render to the state of Virginia about fifty thousand dollars worth of gratuitous service. What right has the state to impose this onerous tax on one class of her citizens? For her neglect of her sick poor is virtually taxing each physician of this city about five hundred dollars. What right, we ask, has she to neglect her poor, and thus to

impose a heavy and grievous tax on a single class of her citizens which should be borne by the whole community, and then would be scarcely felt? Let the commonwealth, then, look to her poor as well as her rich. But the establishment of such an institution is not only the duty of the state, but her interest. The advantages which such a hospital would afford in medical teachings would repay her by having her physicians more thoroughly instructed and therefore better guardians of the public health. And certainly the state owes this to the medical community, who have been serving her so long without remuneration. But such an institution should be, strictly speaking, a *charity hospital*, and not a money making concern for the favored few.

4. The legislature ought to reorganize and endow the Medical college of Virginia.

Let it be placed under the care of a board of visitors, who are medical men, not lawyers, and have the same system and terms of instruction with the University of Virginia.

No visitor should be eligible to a professorship within three years of his being a member of the board.

The failure of previous efforts to establish a school in Richmond, having the confidence of the profession and that degree of prosperity which the locality ought to insure, should convince the public that radical changes are necessary. The history and brilliant success of our state university, with its thorough instruction, will indicate the nature of these changes.

Let a little republicanism be infused in the organization, and all *cliqueism* and nepotism and favoritism discarded. As long as the Medical college of Virginia, with its honors and emoluments, is made the *especial pabulum* of a few families on account of the public services of some of their ancestors, the state with all its *funds* cannot galvanize it into vigorous growth. Aristocracy in Virginia is threadbare, and *mental* endowments are as *unentailable* as wealth.

We know that these views are very distasteful to some people. But who can deny their justness or soundness? Our journal has always advocated these principles. This has

gained for it a very bitter, but fortunately a very limited opposition. Even now, we understand propositions are being submitted, having for their object our dismissal from the editorial chair. One individual, "save the mark," to effect this object, assured the publishers and owners of this journal that it is the "weakest journal" in this country. May be he has deserved and felt its stings. We wouldn't be surprised if he was actuated by some private grudge.

But, in the name of Heaven, if any one covets the subscription list of the *Stethoscope*, why does he not go to work and fairly win it?

With this intimation of the method in which we shall not grumble if put down, we take leave of our kind intermeddlers for the present.

P. S.—Since the foregoing was put in type, we have received from the proprietors of the *Stethoscope* the notice (which will be found in this issue) of its amalgamation with another journal and transference to other hands.

When the preceding editorial was penned, we were assured, by one of the proprietors, that there was no probability of any change being made in its editorial conduct. Otherwise, we might have attempted a becoming valedictory. As it is, we have only time and space to take French leave.

G. A. WILSON,  
R. A. LEWIS.

Dec. 1855.

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## SELECTED ARTICLES.

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### ON THE ADVANTAGES OF LARGE DOSES OF QUININE IN THE TREATMENT OF INTERMITTENTS—By Dr. Murchison.

It has been a matter of considerable question, whether the quinine should be given in one large dose, or in repeated small doses during the intermissions. Dr. Home of Edinburgh, from his experiments, pronounced in favor of the repeated small doses, as also Dr. Barker of Dublin. Dr. Brown, in the "*Cyclopædia of Practical Medicine*," recommends two grains every three hours, or four every six, during the intermissions; but he allows, that in those cases in which "life probably depends on the prevention of a paroxysm," it should be given in much larger doses, such as a scruple. Dr. Watson of London is also favorable to the repeated small doses, amounting

to 12 grains in the 24 hours, which plan, he says, he has found most successful, though, at the same time, he acknowledges, that a "very few paroxysms have occurred after the patient has begun to take the medicine." He also urges this plan on economical grounds, it being our object, he says, to make the cure "as cheap as possible." On the other hand, we have practitioners recommending large doses. Dr. Elliotson gave a large dose just after the paroxysm, and smaller repeated doses during the remainder of the intermission, amounting, in all, to 20 or 30 grains in 24 hours. Dr. Copland recommends a full dose, 6 to 8 grains, immediately after the fit, or shortly before its return, or a large dose followed by smaller doses every three or four hours. Dr. Shapter, in "Tweedie's Library of Medicine," remarks, "Some physicians have administered it to the extent of 20 grains at a dose, and have by this means succeeded in putting an immediate stop to the disease."

Dr. Christison, in his "Dispensatory," says, the intermittents of the tropics require 36 or 40 grains on an average; and, in a clinical lecture delivered in Edinburgh (March 19, 1850,) he stated, "It is better to give a large dose at once, such as 36 grains, which has been shown to be the average amount required in India." Dr. Christison informs me, that his calculation, that 36 grains was the average dose necessary for the cure of tropical intermittents, was deduced from reports on the febrifuge virtues of quinia, made by medical officers of the Madras army, at the request of the medical board, and published in the Madras medical reports for 1831.

In America, the medium dose is stated by Dr Watson to be eight grains.

Continental practitioners seem to be also in favor of the repeated small doses. Thus, Rayer, in his article on fever, speaking of French practitioners, says, that though sometimes 5, 10, 20 or even 30 grains are given at one dose, yet the great majority of practitioners, in place of giving one large dose, divide it into several, which are given at intervals of one or two hours, during the intermissions.

In Italy, Dr. Watson says, the physicians find small doses inadequate, and are in the habit of giving 12, 24, or even 30 grains at a time. I found myself, however, during a protracted residence in the north of Italy, that the general practice consisted in administering repeated small doses. On the other hand, we find a German physician, Dr. Pfeufer, of Heidelberg, recommending the administration of a single large dose, in preference to the repeated small ones.

In India the practice by repeated small doses has been, and

still is, the most general; and I myself shall never forget the look of astonishment with which an apothecary of some standing in the Indian service regarded me, when the "new assistant surgeon" ordered a scruple dose of quinine. The attention of the profession in India, however, is being now called to the superiority of the treatment by large doses, and principally owing to the advice of the late superintending surgeon Corbyn, who, in a published annual report on European troops, states, that he has long been convinced of the efficacy of this mode of giving quinine, and mentions the results of the experience of several medical officers, to whom he had recommended the practice. Of these, Dr. Mackinnon, who had been in the habit of giving half drachm doses of quinine at the termination of the sweating stage, says, "I have never seen it fail to put a stop to the disease at once." Dr. Mactier speaks equally favorable of the practice.

On my first arrival in India, I had resolved to put to the test of experiment the practice recommended by my former preceptor, Dr. Christison; and I was not a little gratified in afterwards finding, by the published report of Dr. Corbyn, that results, equally favorable with my own, had been obtained by other observers. The result of my observations, then, on the 115 cases, goes to prove that the practice most effectual in at once checking the paroxysms of ague, is that of administering one large dose of quinine during the third or sweating stage. The usual dose given was 20 grains in a draught, with a few drops of sulphuric acid to increase the solubility of the salt. Generally this was followed by a few two grain doses, twice or thrice a day, per precauzione, as the Italians say; but I believe that this is hardly necessary. In no case, even in those in which there had been violent headache and other symptoms of cerebral congestion during the paroxysm, did I observe any unpleasant symptoms from the physiological action of the drug. Many of the patients complained of slight buzzing sounds in the ears, but I believe that more or less of this symptom is necessary for the sure success of the medicine; at all events, when it occurs, it is a sign that there is no use of pushing the medicine further. In 95 of the 115 cases, this treatment by the one large dose was adopted. In 56 of these 95 cases, or 59 per cent. the paroxysms were at once checked, there being no return after the administration of the single large dose of quinine. In 36 cases, or 37.9 per cent. there was only one paroxysm; and in 3 cases, or 3.15 per cent. two paroxysms, after the quinine. In all the cases, moreover, in which there were any paroxysms subsequent to the administration of the large dose of quinine, these were much milder

than the preceding ones, often not occurring, until after the intermission of upwards of 24 hours, or being unaccompanied by rigors in the cold stage; while in several instances they appeared to be owing to costiveness of the bowels; for it seemed necessary for the successful administration of quinine by any plan, that the bowels should be freely moved.

Again, in 16 out of the 115 cases, the ordinary plan of treatment was followed by repeated small doses of two or three grains of quinine, during the intermissions. In not one of them were the paroxysms at once checked; five of them had one paroxysm after the commencement of the quinine; seven of them had two; and four three. Moreover, if we may reckon as any indication of the inveteracy of the fever, as I think we are fairly warranted in doing, the number of paroxysms which have preceded the commencement of treatment, the 95 cases, in which the paroxysms were almost at once checked by the one large dose, were, on the whole, more inveterate than the 16, in which the other plan of treatment was adopted. Thus we find, by another column in the table, that the average number of paroxysms before treatment, in the 95 former cases, was  $2\frac{1}{2}$ , or rather more than  $2\frac{3}{4}$ , while the average in the 16 latter cases was only  $2\frac{1}{2}$ . The above facts will speak for themselves. For the success of the treatment, it is necessary that the large dose be given during the third stage, and as near its commencement as possible. It is far from being so effectual, when given during the intermissions between two paroxysms, or a few hours before the expected commencement of a paroxysm, as is recommended by some writers. Thus, in the four cases which remain of the 115, the large doses were given during the intermissions; in not one of them were the paroxysms at once checked; two of them had two subsequent paroxysms, the other two had one, the average number of paroxysms before treatment in the four cases being two. Latterly, I always gave instructions that the quinine should be given as soon as the patient began to perspire freely after the hot stage.

Again, in answer to Dr. Watson's other argument in favor of the repeated small doses, that it is the cheapest, we would reply that we believe such is not the case. Not only is the plan of treatment above recommended the most efficacious in checking the paroxysms—it is also the most economical as regards the expenditure of quinine. This, too, is the point of the highest importance, when we consider the immense amount the purchase of quinine must cost our Indian government annually, and the chances there are of the supplies of the drug at some future period running short. We have

already stated, on the authority of Dr. Christison, that the average amount of quinine found necessary to check the paroxysms of ague in India was about 36 grains, and we believe that this quantity is often greatly exceeded. The contrast, however, between the two different plans of treatment, as regards the expenditure of quinine, is very striking. In 92 cases treated by one large dose given during the third stage, the average quantity required to check the paroxysms was only  $23\frac{3}{4}$  grains, while in those treated by repeated small doses, the average quantity required for the same purpose, was almost double, or  $45\frac{1}{4}$  grains. In addition to the advantages of the plan of giving quinine just recommended, on the grounds of its greater efficacy and economy, there are others which may be mentioned. Thus, it enables the patients to return to their duty much sooner than the old plan—a matter of no small importance in military practice; and it gives less trouble to the apothecaries and hospital attendants.

*Edinburgh Med. and Surg. Jour.*

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#### YELLOW FEVER OF NEW ORLEANS IN 1855.

The yellow fever of 1853, '4 and '5, a triune or triennial epidemic, though temporarily suspended during the winter season, rages still in New Orleans. The illusory hopes and flattering prognostications which many persons indulged, that the unparalleled epidemic of 1853 had exhausted itself, or rather the food on which it fed, have ended in disappointment. Several cases of the fever occurred in the spring. The number slowly augmented, while cholera, then prevalent, rapidly declined at the approach of the summer solstice. The reported weekly mortality from yellow fever for eight weeks, commencing with June 23, and ending the third week of August, is respectively as follows: 17, 32, 44, 119, 173, 222, 291, 394. Total for this period 1,292—anterior to which the deaths from yellow fever were very few—since which they have progressively increased, and will be summed up hereafter.

After the most searching investigation, there appears to be an entire unanimity of opinion, both among contagionists and noncontagionists, that the yellow fever of 1855 originated in New Orleans, and that all the earlier as well as the later cases occurred among persons who had not been in any manner exposed to the fever in foreign ports or to imported contagion.

The weather-wise expounders of the cause of yellow fever have not as yet accounted for its origin nor foreseen its approach any more than the contagionists. The strong current of events has successively swept away the sandy foundations upon which their speculations have been erected. They can no longer believe nor expect others to believe their predictions, their irrelevant data, their fruitless methods of exploration, their special pleadings and inconsequential reasonings. The austro-boreal axis of yellow fever in America from Rio Janeiro to Norfolk, in Virginia, is now little short of 60 degrees of latitude. Within these parallels around the globe may be found every variety of hot, humid, parched, sandy, inundated, swampy, treeless, jungly, wooded, alluvial, mountainous soils—the swamps of New Orleans are rivaled by those of Southern India—its heats surpassed by those of Central Africa and Asia—its filth by that of the African, the Hottentot, the Hindoo, and the Chinese cities—and yet these regions, containing the hive of humanity, do not suffer from yellow fever epidemics, how high soever the thermometer may range—how much soever the rain may fall—how unfavorable soever may be the meteorological conditions of these climates among all the races, Caucasian, Maylayan, Mongolian, Ethiopian.

Meteorological tables have been consulted with a view of laying before the reader the temperature, rain, &c. for the current year; but the remaining restricted space of this journal, not to name the little faith which can reasonably be entertained in meteorology as a reliable expositor of the efficient cause of epidemics, will justify the omission of sterile tables of figures and fractions, which have long been used by medical dullness as platforms for platitudes, contradictions, and incoherent theories of the origin of epidemics, foreign to the jurisdiction of the beautiful science of meteorology. As a physical science, it is available for useful ends, particularly in agriculture, and may eventuate in the solution of many ætiological questions of high import to the physician—"a consummation devoutly to be wished." The influence of the weather, particularly its sudden change, is manifest for good or evil in both the sick and well, as all know, without consulting tables and decimal fractions.

Dr. J. J. Chisholm, in his able sketch of the yellow fever of 1854, in Charleston, reported in the Medical Journal of that city for July, says: "No particular meteorological conditions have been observed to favor the occurrence of yellow fever."

It appears from the public journals, that Dr. Poesey's daily

meteorological observations, made for the Smithsonian institution for the year ending May 1st, 1855, show that only 37.796 inches of rain fell at Savannah, whereas the average for the ten preceding years is 50.249 inches, or about one-fourth more; and yet, during the dry year aforesaid Savannah suffered from an epidemic yellow fever scarcely ever paralleled in severity.

Men who never give up their ill-founded theories until they give up the ghost, will find some difficulty in accounting for the origin of yellow fever on the wet weather basis in 1855, seeing that before the rains in June this disease showed itself, as did the cholera, during one of the driest seasons ever witnessed in New Orleans.

The type of the prevailing yellow fever is that of yellow fever, and has not changed because opinions and modes of practice (good, bad, indifferent and expectant) have changed, or are changing at the present transitional epoch. The most remarkable peculiarity developed by recent epidemics is, that of a greatly increased ratio of recoveries after the occurrence of black vomit. The assumption that the disease is, at present, more or less inflammatory than usual, is probably an after thought, by which opposite modes of treatment are to be reconciled without impeaching the consistency of *Æsculapians*.

The physician, called in at the beginning of the disease, finds the system responsive to treatment, whole families recovering in due time; whereupon he might, from a limited view, very naturally think that the type is very mild. Another physician called to see only advanced cases, badly nursed, loses nearly all; whereupon the type is viewed as a very malignant one, drugs being regarded as nearly useless.

The tendency of the New Orleans medical mind is rapidly concentrating towards the belief that this formidable disease does not necessarily require formidable doses of powerful drugs for its most successful treatment. There is even danger that the rebound from the heroic treatment will end in nonmedication—operations offensive and defensive, in an armed neutrality. Veterans, who have grown grey in epidemic warfare, fear to hit the disease unless at its onset, lest they should hit the patient, feeling very much like William Tell when he was compelled to shoot the apple upon the head of his son.—*N. O. Med. & Surg. Jour.*

CEPHALIC VERSION IN THE SHOULDER PRESENTATION, WITH  
THE ARM IN THE VAGINA—Read before the College of  
Physicians and Surgeons of Philadelphia—By Dr. Penrose.

The case to which I wish to call the attention of the college is interesting, as having been one of difficult labor, in which an unusual method of delivery was attempted and entirely succeeded. The case to which I refer was one of shoulder presentation; and the treatment consisted in bringing the *head* of the child to the superior strait, instead of, as is almost universally recommended, making version by the feet.

My attention had been called to this plan of treatment for similar cases, by a pamphlet of Dr. Wright of Cincinnati, in which he advocates the resort to version by the head in all cases where the shoulder presents, even though the arm of the child be in the vagina.

It is not necessary that I should occupy the time of the college in referring to the opinions of authors on this subject, as they are doubtless well known to all present—the almost universal direction in these cases being, particularly when the arm is in the vagina, to resort to version by the *feet*.

The following is a history of the case, which I take from my notes:

On the evening of the 3d of April I was called, by a midwife, to see Mrs. M—— as a case of difficult labor which she could not manage. On reaching the patient, I learned that she had been taken in labor some time in the morning; that at two o'clock she had given birth to a child, and that the midwife, on making an examination, discovered a second child, presenting by the shoulder, its arm being in the vagina. This was at two o'clock in the afternoon. I did not see the patient until about seven o'clock, five hours after the rupture of the membranes. I then found her with the uterus contracted spasmodically upon the child, suffering a great deal of pain in consequence, whilst her condition had not been at all improved by brandy freely given by the midwife.

On making an examination, I found the arm in the vagina, considerably swollen, the shoulder at the superior strait, the head high up in the right iliac fossa, being readily felt through the abdominal walls, the back of the child towards the symphysis pubis. Having carefully diagnosed the position of the child, I determined to resort to version by the *feet*, but met with so much difficulty from the firm contraction of the uterus, together with the great irritability and restlessness of the patient, who rolled and struggled so violently when I attempted

the operation, partly, no doubt, from the effects of the brandy she had taken, that I was forced to desist. I then determined to try the plan of treatment as suggested by Dr. Wright, which consisted, as the first step, in carefully returning the arm into the cavity of the uterus, which was not very difficult, and then, with two fingers on the shoulder, I endeavored not so much to push it up as to slide it away from the superior strait, attempting in fact to imitate spontaneous version, by causing the whole body of the child to revolve in the cavity of the uterus. This action upon the shoulder was very much facilitated by an external manipulation, through the abdominal walls, upon the head in the iliac fossa, which consisted in attempting to force it toward the superior strait. To my surprise, the shoulder readily yielded and ascended. The next minute, still continuing the process, the neck and shortly after the side of the head were felt at the superior strait, and then, by a little more manipulation, the vertex was brought down in the left occipito-anterior position. The moment the head was placed in the proper position, the patient expressed herself completely relieved from the severe pain she had been suffering for hours.

For a time, the uterus ceased entirely to act, but pains coming on, they were stimulated by ergot, the parts having been dilated by the passage of the first child, and, in about an hour after, the child was born ALIVE.

It is proper, however, to state, as explaining, to a certain extent, the facility with which the operation was performed, that the child weighed only five pounds, yet on the other hand it should be recollected that the smallness and mobility of the child are, perhaps, the most common cause of shoulder presentations, and hence, in such presentations, we may expect, very generally, to have small children to deal with, and, moreover, that version by the *feet* had been attempted, and had not been accomplished.

It might be urged that, as the child was not large, the case might have been left to nature, and labor terminated by spontaneous evolution. But what are the facts of the case? Five hours had elapsed since the rupture of the membranes, and one of the earliest changes noticed when spontaneous evolution takes place had not yet occurred. I refer to the rotation of the presenting shoulder to the symphysis pubis, as preparatory to its engagement beneath the arch. Indeed, the spontaneous expulsion of the child in these cases is the exception, not the rule; and when it does happen, if we think for a moment on the mechanism of labor by which delivery is accomplished, we cannot fail to perceive that the mother must

be exposed to all the dangers attending a long and painful labor, while the child is so powerfully compressed that death is the general result. Velpeau gives statistics of one hundred and thirty-seven cases of spontaneous evolution, in which but twelve children were born alive.

It is asserted by some that an error of diagnosis has existed in those cases where it is stated that version by the vertex has been successfully performed in shoulder presentations; that they have been really cases of head presentation, complicated by a descent of the arm. But this certainly was not so in the case to which I refer, the head being distinctly felt in the right iliac fossa, through the abdominal walls, whilst the partial introduction of the hand into the cavity of the uterus, in the attempt to make version by the feet, enabled me perfectly to recognize the position of the child.

Again—it is said that the operation of version by the vertex is a very difficult one; that we cannot, without subjecting the mother to very great danger, push up the presenting part of the child, and search for the head; and then, having found it, that we cannot grasp the round and slippery occiput and bring it to the superior strait. This objection in many cases may be well founded; but the operation which I have related consisted rather in pushing the shoulder away from the superior strait, causing thereby the child to revolve in the cavity of the uterus. Of course, as soon as such a motion of rotation is communicated to it by pushing away the shoulder, we must of necessity have some other part brought to the superior strait, which part will be first the neck, then the head, and by a little manipulation, the occiput can be brought down, and an *impracticable* case of labor can be thus changed, without or with comparatively little pain to the patient, and in a few minutes, to one of the most simple character; and not only thus changed, but effected without exposing the child to the great risks to which it is always liable when version by the feet is resorted to; and, if an attempt to make version by the vertex should fail, without giving our patient any more pain, our hand being in the vagina, our fingers in the mouth of the uterus, we can most easily, if the case admit of it, pass our hand upwards, grasp the feet, and bring them down.

ON THE EFFECT OF OPIUM IN ARRESTING THE PHLEGMASIÆ IN THEIR FORMING STAGE, AND IN COMBATTING THOSE WHICH HAVE RESISTED ANTIPHLOGISTIC, REVULSIVE, DERIVATIVE, EVACUANT AND ALTERATIVE TREATMENT—translated from the French of M. Debreyne—*Revue de Thérapeutique Médico-Chirurgicale* of June 15, 1855—By M. Morton Dowler, M. D. of New Orleans.

It is well known that the phlegmasiæ are almost always preceded by pain to a greater or less degree, and which is of great variability. This preceding condition is the cause of the results that follow. The pain or exaltation of sensibility is the exciting cause of the phlegmasiæ. Put an end to this pain, then, and the phlegmasiæ becomes impossible for want of nervous stimulation. Thus, in bringing back the exalted sensibility to its physiological standard and normal measure we prevent the sanguineous afflux which is the necessary result of nervous excitation. In a word, we prevent phlogosis, verifying the famous maxim, "*ubi stimulus ibi fluxus*;" that is to say, "*ubi stimulus deletur, ibi fluxus non nascitur*."

But by what means are we able thus to arrest and throw off the phlegmasia? Why, by a celebrated therapeutic agent well known; and, nevertheless, very rarely employed under these circumstances as a directly curative agent. This heroic agent, this divine gift, as it is called by Hufeland, without the aid of which Galen, Sydenham, Hoffman, Werlhof, could not conceive that any man could be a physician—this mysterious, powerful and highly therapeutical agent is opium—opium administered both internally and externally, at the same time, according to the therapeutic exigencies and circumstances of the case.

This unusual, abortive and preventive mode of treatment is applicable in all the acute phlegmasiæ, even when external; but particularly in inflammatory epidemics, in which the invasion makes its appearance in an invariable and uniform manner. It is thus that Sarcône treated an epidemic billious pleurisy, in which the pain at the onset was excessively severe, and in which inflammation did not develop itself till the end of three days after the attack. How did this great practitioner treat these cases? Why, he combatted the pain with opium, which threw off, at once, a disease which otherwise had been almost always mortal. After the third day, however, when the inflammation was well developed, and the pain was but a symptom of actual phlogosis, the disease no longer yielded to opium, it being then not only useless but

injurious. See the introduction to our work, entitled, "An Essay, Analytical and Synthetical, on the Doctrine of Morbid Elements—considered in their application to Therapeutics."

We may further recall the terrible epidemic of cerebral disease which broke out in 1840 and 1841, at Avignon and at Strasbourg, though at its first appearance it was not treated with opium. This singular cerebral phlegmasiæ, called at Avignon, cerebro-spinitis, and at Strasbourg, encephalo-rachidian meningitis, resisted the whole circle of remedies, excepting opium. Copious blood letting, emetics, purgatives, derivatives, revulsives, &c. all failed to arrest this formidable disease. Opium, administered in large doses, promptly and completely succeeded. Before the employment of opium in this disease, at Avignon, out of thirty cases twenty-nine died in spite of repeated and abundant blood letting. Either this disease was a phlegmasiæ of the brain and its membranes, confirming the principle, that opium cures sometimes what are, to all appearance, inflammations; or, it was a nervous fever, and then, by a parity of reasoning, opium equally sometimes cures the nervous pyrexia. We shall see, elsewhere, that in either case opium is not wanting in curative power.

Professor Cayol, speaking to his pupil one day in relation to a cerebral case of a very grave character, said: "You see here a cerebral affection of the most intense character arrested in its progress by the most energetic treatment, and which would appear to you extremely hazardous. You have seen the patient during three days plunged into a profoundly comatose state, deprived completely of sight, of speech, and of all his intellectual faculties, and who has not awakened from this frightful lethargy till after having taken enormous doses, forty centigrammes (6 + grains) of opium, daily. You have seen under the influence of this agent, which has been continued during six days, the disease rapidly and without impediment terminate in the most favorable manner." Clinique Médicale.

It is proper to observe here, that we not unfrequently see in cerebral affections that a nervous element supervenes or succeeds the phlegmasial symptoms. It is in such cases as these that the administration of opium is followed by complete success. We see sometimes in pneumonias a delirium purely nervous, that is properly combatted by opium, musk, &c. Long since, Hufeland pointed out this peculiarity in cerebral affections. This most eminent practitioner thus expresses himself on the subject of the encephalic phlegmasiæ. In speaking of the croup, he says: "The inflammatory period

may often give place, and frequently with great promptitude, to the spasmodic or nervous state, which is well defined; and then nothing but powerful antispasmodics can be resorted to in order to save the patient." He further adds: "Encephalitis ought to be treated on analogous principles. Opium in this disease has a two-fold power, acting in a specific manner on the sensibility; when, after blood letting, the application of cold, the use of antiphlogistic purgatives, the stupor and the delirium does not yield, and when depletion can be carried no further; and, also, acting in like manner when the inflammation has given place to the nervous state of the brain, or even when an effusion of serosity has taken place, opium alone being very often capable of completely removing the disease, though in addition to this, we may prescribe calomel with good effect, with a view of favoring resorption. For a long period the efficacy of opium has been known and appreciated by the ablest practitioners in cerebral affections of the nervous kind, and which have assumed the nervous character after the subsidence of the inflammation." *Manual of Practical Medicine*, p. 726.

Hufeland has generalized this high practical principle, and applied it to all the local inflammations, as he calls them. It often happens that, after all the resources have been exhausted in the way of antiphlogistics, general and local blood letting, revulsives, derivatives, epispastics, &c. the local symptoms do not yield; or, after having become mitigated, they return with a redoubled intensity, which takes place especially in phlegmasiæ of the chest, in respect to the pleurodynia, cough and dyspnœa; the pulse remains frequent and febrile, but no loss of blood, either general or local, is longer admissible. The nervous and spasmodic element is here all that announces the indications. Opium, then, here is the only certain remedy. In such conditions, says Hufeland, opium is the only remedy—a divine remedy; twenty-four hours suffice for it to remove all that remains of the inflammation, as by enchantment. In another place he reports the same thing: "A grain of opium taken at night produces the most marvelous effects. It removes all that remains of the inflammation in a single night. The following is his formula: *R Hyd. submur. gr. vj; opii. gr. ij; sacch. albi. 3 ij. M. Ft. Pulv. in chart. vj. Divid. S.* One every three hours.

The older practitioners of eminence understand well the force of these principles, and appreciate their practical value and truth; and the junior ones, if they know how to avail themselves of our most valuable resources, will learn the same in the exercise of their profession, with many other things also,

which they have not been able to learn in the schools nor in the classic authors of our day.

MM. Trousseau and Pidoux tell us that they have often combatted pleurodynia in pleurisy, by the local application of morphine on the denuded dermis.

When Huxham gave opium in pneumonia and pleurisy, it was always after preparatory blood letting, and when there was presented a nervous or spasmodic element. It is with this view, after the method of M. Recamier, we generally employ musk against the nervous delirium which sometimes attends the progress of pneumonia.

The following case is one of simple, pure and legitimate pleurisy, as the ancients say, that was treated by opium alone, with the exception of a preparatory blood letting, under the influence of which latter the piercing pain in the side was augmented. A woman, aged 28, had had frequent expectoration of blood, for which she had been subjected to a great number of blood lettings, both general and local. She had never had rheumatic pains. Eight days before her admission into the hospital, after violent exercise, which had thrown her into a free perspiration, she experienced a chilliness, which was followed by febrile shivering. There speedily followed a constricted state of respiration, and a severe pain in the left side of the chest.

On the day of her admission the following symptoms were observed: Anxiety; agitation; discoloration of the face strongly marked; impeded respiration; dry cough, with piercing pain in the side of the chest towards the præcordial region; skin hot; pulse small, frequent, and difficult to compress.

The exploration of the chest by percussion and auscultation gave only negative results, respiratory murmur existing at all points. Rice water, gum potion, three cups (palettes) of blood drawn. Diet.

The following day, (Dec. 4th,) no improvement whatever in the condition of the patient. On the contrary, the pain in the side is more severe:—Hydrogala; gum potion, with two grains of extract of opium, to be taken by spoonfuls.

At eight o'clock in the evening the patient had taken the entire potion, and had passed a comfortable day, but in the night was agitated.

On the 5th, but little change in the symptoms. Potion continued, with two grains of opium. Towards the end of the day the pain in the side and the impeded respiration greatly changed for the better; was perfectly calm during the night.

On the 6th, neither cough nor impeded respiration ; pain in the side almost disappeared. A blister was ordered on the arm, and some diet allowed.

On the 7th, cure complete. The opium continued, however, during some days, leaving it off only when it brought about a slight constipation.

This case is detailed in the Clinique Medicale of M. Cayol, p. 61, under the denomination of Nervous Fever, with Pleurodynia. Whatever may be the name we may give to this disease ; whether it was cured by opium or by spontaneous resolution, the analytic spirit by which it has been appreciated does not the less spread the perfume of the vitality of ancient medicine, that we always respire with pleasure.

If Graves of Dublin has obtained the happiest effects from opium in large doses, in the treatment of peritonitis, it is very probably because he has been able to diagnosticate the nervous element.

M. Cayol has reported in his Clinique Medicale the case of a metroperitonitis, that he calls nervous fever, with metroperitonitis, and that he treated with local and general blood letting at first, and afterwards by three or four grains of opium daily. The patient was cured in a very short space of time of an extremely grave malady. The same views are illustrated in this case, in relation to the nervous or pain creating element.

Every one knows that opium is a heroic remedy in certain kinds of nonfebrile and slightly inflammatory dysenteries, being, as the ancients say, catarrhal, rheumatismal, or bilious, &c. in this latter kind, after the necessary evacuations by catharsis and emesis ; in cases in which the inflammation has been sufficiently combatted ; and in cases in which the initial period can be laid hold of, in order to remove the disease before the development of inflammation. This illustrates our principle of treatment. How many sporadic cases of dysentery have we not cured in one, two or three days with opium alone, in connection with rice water and broth for nourishment ! As to epidemic dysenteries, the treatment, as we all know, is extremely variable. We shall not here discuss the subject. We shall not speak further of opium in dysentery, and its value in diarrhoea. Its virtues are too well known in these diseases to render this necessary, and anything further on the subject would lead us out of the limits we have prescribed for this paper.

Let us pass to ophthalmic affections. In relation to these diseases, we may remark that Demangeon employed opium, with complete success, in the form of collyrium, in all cases of painful chronic ophthalmias. For ourselves, we prefer our

own collyrium of the extract of belladonna, composed of two grammes (30 + grains) of the extract to 125 grammes (3 xxx) of rose water. At the time of writing these lines, we are employing this collyrium in an ophthalmia accompanied with severe pain, moderate redness of eye, and headache. The patient washed the eye three times a day with a fine compress, saturated with this collyrium. Great relief is experienced after each application. Two days later the other eye became equally affected. He applied the same lotion, and both eyes were cured at the end of five days, after having at the same time experienced two paroxysms of pain and of swelling of the eyelids, from having imprudently exposed himself to a cold wind. As our community is at present laboring under a rheumatismal and catarrhal influence, we shall, after the manner of the ancients, call this ophthalmia *rheumatismo catarrhal*. Blood letting, general or local, is therefore here altogether useless, unless under particular circumstances. At the present time many other cases of ophthalmia are making their appearance, invested with the same character.

Who can say that opium and belladonna, administered both internally and externally, immediately after the operation of cataract, might not be the best means of preventing those terrible inflammations which so often cause us to lose the whole fruits of the operation? If in plethoric subjects we should have cause to fear that the use of opium might be attended with danger of congestion, we might resort exclusively to belladonna, a hyposthenic agent, which acts admirably when antiphlogistics are indicated, as we have already shown.

The following is an extract from what we have already put forth on the treatment of ophthalmic affections in our book, "on the therapeutic virtues of belladonna," a work honored in Belgium with the golden medal:

"When the eyes are but slightly red, and the pains are nevertheless very severe, we may at once conclude that the disease is much more nervous than inflammatory; and consequently we are authorized at once to resort with confidence to the preparations of belladonna. This is what we ordinarily do, even associating with it sometimes a little opium, (ext. aq. theb. in a collyrium made of extract of belladonna.) Lisfranc, in such cases, employed the extract of this plant as a friction around the base of the orbit. It is thus that he cured, in one, two or three days, ophthalmias which had resisted antiphlogistics and other usual modes of treatment. This means had been carried into effect by Dupuytren, before it had been practiced by Lisfranc, or at least the former em-

ployed belladonna with eminent success in severe diseases of the humors of the eye.

“Further, according to Dr. Rognetta, the action of belladonna is hyposthenizing. It is not proper, he adds, in diseases in which antiphlogistics are useful. According to this physician, certain serious inflammatory diseases in the clinics of Italy are treated by belladonna alone in large doses. In the internal ophthalmiæ, belladonna, according to M. Rognetta, is, after blood letting, the most prompt and salutary remedy. It is equally appropriate in external ophthalmiæ; but it takes less hold on the simple inflammations of the white tissues, (keratitis and sclerotitis.) When there is the least manifestation of photophobia, we ought to resort to it, and particularly in scrofulous ophthalmiæ, where, as is well known, photophobia is so common, so troublesome and so difficult to conquer, even with belladonna itself. Then there is another remedy, that of the cauterization of blepharitis, or palpebral granulations by means of a crystal of the sulphate of copper, followed by a collyrium of the same salt.” See our work on belladonna, in which will be found more ample details on the diseases of the eye, where we have treated of the employment of the celebrated solanum. But, to return to opium.

MM. Malgaigne and Padioleau give opium in large doses after surgical operations, whilst they have any reason to fear the appearance of untoward inflammation. They affirm that by this means they avoid traumatic erysipelas and diffused inflammation of the callular tissue. It is by irrigations strongly charged with laudanum, that M. Pasquier produces the resolution of paronychia and incipient phlegmons. We ourselves have often obtained the same result with opium associated with belladonna, in the form of an ointment. Thus, then, we may have recourse to opium in all the uncomplicated pains, (that of gout excepted,) that is to say, pains without acute phlegmasia or acute fever, without any great sanguineous plethora, and especially that of the cerebral kind. In this manner, we may perhaps prevent a certain portion of acute phlegmasiæ, and consequently rescue the patients from great danger. If there exists at the same time any convulsive spasmodic movements, we may combine opium with extract of belladonna.

Let it be remembered, however, that opium cannot extinguish pains which are other than purely vital, that is to say, pains which are initial, and antecedent to the phlegmasia; or the final pains, which survive or succeed the phlegmasia. It is no longer admissible in the true phlegmasial pain, which is none other than of a mechanical character, and has its origin

in the compression which the blood exercises on the nervous filaments of the inflamed part. This pain, in a word, is nothing else than a symptom of the phlegmasia, and which I here repeat, opium cannot remove.

And here we proceed to add a few words on the employment of opium in fevers, a class of maladies which sustain a close relation to the phlegmasia.

*Nervous fevers, &c.—Typhus.*—We meet sometimes, amongst subjects who are very nervous and irritable, certain fevers without any very determined character. These are fevers which proceed from venereal, oanic, or alcoholic excesses, (*delirium tremens febrile*,) or from fatigues, from watchings, or from study, &c. In this state of nervous erethism, we employ with great advantage some light opiate preparation, with a demulcent restorative, and lightly analeptic regimen. In this manner we remove the febrile erethism, by removing the over excited nervous system. The slow, hectic essential fever, (Broussais himself has proven its essentiality,) may be treated in the same manner. In relation to the fever of convalescents, if there be appetite, the best remedy is a light restorative and alimentary regimen, studiously adapted to the condition of the digestive organs, and not the useless, not to say suicidal, excess in diet. One thing is certain, convalescents do not disembarass themselves of their fever, without moderation in eating, as we have often observed.

In relation to typhus, though from the period of its invasion in Paris we have observed a great number of cases, we ought to here state that we have never seen opium exhibited in this terrible disease. For this reason, in order to fill this hiatus, we shall here cite a remarkable passage from Hufeland. This illustrious practitioner holds the following language in relation to the treatment of typhus: "Opium (says he) is salutary, when, after having sufficiently practiced blood letting, cold applications and evacuents, the signs of congestion disappear, though the delirium persists, or should it ever run into furor. The condition then is purely nervous, and in numerous cases we obtain the entire favorable effect of opium, though it is better to combine it with calomel. I shall never forget the joy it brought me in the case of one of my cherished colleagues. The patient was in the seventh day of a most intense typhus, pulse small and so frequent that it could scarcely be counted, accompanied with coma, delirium and subsultus tendinum. Blood letting, cold purgatives, calomel, all had been largely employed. I gave him the powders of calomel and opium, before mentioned, and at the sixth dose

the pulse became stronger and slower, the spasms had ceased, the head was clearer, and a crisis immediately appeared. The amelioration began from this time, and went forward regularly. How many other cases I might here cite of an analogous character!

“Opium is further salutary when the typhus is accompanied from the beginning by diarrhœa, or dysentery, or cholera, acting as a powerful derivative in relation to the brain, but with danger of total exhaustion of its forces and of death from inanition. Opium is our only means of arresting these profluvîæ, of calming this super-excitation of the intestinal canal, and of saving the life of the patient. We must, however, take care that the primæ viæ be first freely cleared. Opium was the only agent that proved efficient in the typhus which ravaged Prussia in 1806–7, of which diarrhœa was the essential accompaniment.” *Manual of Practical Medicine*, p. 727. For contagious typhus, see Pringle, who has accurately described it, and especially consult the excellent work of Hidelbrand on Typhus, in which will be found excellent rules for the employment of calmatives in the nervous period of the disease.

With these general considerations which we submit to the consideration of the profession, we take leave of the subject. We have not brought into view either the plegmasia, or all the other diseases in which opium may be happily applied. This would require a volume, and we have no inclination to produce a complete opiology.

We conclude here, by reproducing what we have said on the subject of opium in our *Thérapeutique Appliquée*, 4th edit. “We are convinced that without opium there would literally be no therapeutic means in relation to painful chronic disease. Were we deprived of this magic remedy, of this soothing and beneficent agent, we should consider ourselves without resource, and would at once renounce the practice of medicine. Sydenham gave thanks to God for having bestowed opium on man to cure the innumerable diseases which weigh him down and take away his life.”

Meanwhile, it is with opium as with all our heroic remedies—it is a two-edged sword, and can do much good and much evil, accordingly as it is well or ill applied.

*Sacra vitæ anchora, circumspecte agentibus  
Est opium, cymba Charontis in manu imperiti.—Wedel.*

## ON THE ANÆMIA OF INFANCY—By Professor Mauthner of Vienna.

The author remarks, that for many years the practice of venesection has been on the decline, and he quotes the words of Professor Richter of Dresden: "Poverty of blood is, next to tuberculosis and cancer, the increasing evil of our time, which will bring down a gradual deterioration of the race, and therefore merits our most earnest consideration." According to Valentiner, most neuralgic affections are caused by anæmia; and, according to Trousseau, chlorosis now prevails in the general pathology of the female. An anæmic mother will produce anæmic children; anæmia may be congenital, or acquired from too rapid development and quick growth. It is difficult to believe in the disease as congenital, the quantity of blood in the infant's tissues being normal. Valentin has shown that the amount of blood in the newly born is proportionately greater than in later life; for a child of five to six pounds has nearly two pounds of blood; while at the age of thirty it barely attains one-fifth of the weight of the body. But in infancy, as in old age, the watery constituent is more considerable than in middle life.

The cause of this congenital anæmia lies in the general corporeal weakness of the mother, whence also it comes that there are so many abortions and early deaths. Want of proper food during pregnancy exerts a potent influence, too commonly at work among the lower orders, oppressed with want and care; and the younger children are more subject to the disease, because the exhausted mother loses in time the power of nourishing her children by her own milk, and the father has not the means of procuring a wet nurse. A child born of a mother who has suckled another infant during her pregnancy generally suffers from poverty of blood. Losses of blood, or profuse mucous discharges, by injuring the mother's health, are to be regarded as prejudicial to healthy foetal development. An aged or diseased father commonly begets an anæmic child. Congenital syphilis must also be regarded as a cause. The morbid change in the blood being unknown, we must be content with the term "anæmia syphilitica." It is not always recognized, but it is of most momentous importance as regards the rising generation. Should an infant affected with this disease be vaccinated, a peculiar glandular disease is apt to ensue from this second poisoning of the blood. The author proceeds to enumerate the symptoms of

congenital syphilis. The child suffers from excoriations about the mouth and anus, &c.; from roseola, pemphigus, eczema, psoriasis, or from a peculiar tenuity, smoothness, and transparency of the epidermis. They do not possess power to resist external influences; they are long in teething; tuberculosis is apt to ensue in the course of time.

The anæmia of development comes on when growth at any period is very quick. Hence we have the anæmia of dentition, the anæmia of puberty, or chlorosis.

From experiments upon animals, Nasse has shown that animal diet renders the blood more coagulable than vegetable diet, and increases the number of the blood corpuscles. From sugar and starch meal there is formed a glutinous lymph plasma, but no corpuscles. A purely vegetable diet, therefore, is not suited for infancy; the more so from the anatomical fact, that the cæcum, that part of the intestinal canal where vegetable digestion goes on, is but imperfectly developed at that period. Anæmic children are very apt to suffer from inflammations. Nature endeavors to excite a reaction from this depressing influence; and stasis of the blood commonly ensues in organs unfitted for active circulation; but the exudations tend only yet more to impoverish the blood; and venesections materially increase the evil. One of the evils of infantile anæmia is hæmorrhage from the congested and delicate vessels of the large intestine. This occurrence is frequently overlooked, or confounded with other disorders, such as convulsions. The author has verified the fact by dissection.

When the plastic power of the organism, says Canstatt, is exhausted by rapid natural and morbid evolutions, then tuberculosis suddenly forms, and the latent material begins to be deposited upon any excitement in the different viscera. Thus, it is to be feared, during the blood impoverishment of dentition; and it attacks especially children subject to perspirations, and to excited pulsations of the heart.

The practitioner should never forget, in considering the diseases of childhood, that sudden attacks, even death itself, may occur just as easily in children from anæmia as from hyperæmia. Thus, cases of convulsions and other attacks, once regarded as inflammatory, require, in the present day, more careful examination and more accurate diagnosis.

*Med. Times & Gaz.*

ON INFANTILE PARALYSIS—By Mr. Wm. Adams, Assistant Surgeon to the Orthopædic Hospital.

Whether paralysis of particular muscles or limbs, independent of traumatic lesion, is ever congenital, Mr. Adams considers to be at least doubtful. The cases related of limbs remaining flaccid and useless in infants born asphyxiated, after difficult and instrumental labors, and of facial paralysis, usually of one side, and sometimes accompanied with loss of power in the corresponding arm, &c. which had in some instances been satisfactorily traced to traumatic lesion—cannot be admitted as examples of the affection described. Infantile paralysis usually occurs between the ages of six and eighteen months, generally during difficult dentition, and often preceded by fits or convulsions. It may, however, occur at earlier or at later periods. In one of Mr. Adams' cases, it occurred at the age of five years; and both arms, as well as both legs, were paralyzed. It is said frequently to happen without any convulsive disorder, and when the children are in robust health. Mr. Adams, however, considers that in many of these cases the children had fits, which passed away unnoticed in the night; and careful enquiry had convinced him that in most cases the children were at the time suffering from a slight febrile condition. Many children, apparently in good health, became heated and feverish during the night; the skin, especially of the face, being hot and burning, and the head freely perspiring. Paralysis in children may result from intestinal irritation caused by worms, indigestible food, &c. The cause may be either centric or eccentric irritation. It not infrequently follows marked febrile disorders, especially measles and whooping cough. It is the author's opinion that where many muscles or entire limbs are affected, and where the paralysis is persistent, it depends upon structural lesion of the nervous centres, brain, or spinal cord; that in similar cases, in which the paralysis is transient, it depends upon congestion of the nervous centres, sometimes accompanied with effusion, which afterwards becomes absorbed; and that where single muscles, or a group of associated muscles, are affected, it depends upon some local failure of nutrition in the nerves supplying the muscles, under a general though perhaps slight febrile condition. M. Bouchut describes this affection under the title of "myogenic or essential paralysis" ("Practical Treatise on the Diseases of Children," translated by Mr. P. H. Bird) and admits, as a cause, lesion of the nervous centres

and cords only in those cases which succeed febrile convulsions.

The other cases he groups in two classes, viz: those accompanied with pain in the affected limb, and those following convulsions without febrile excitement; and in these he considers the cause to be primarily and essentially an alteration of the elementary tissue of the substance of the muscles. The nature of the affection in these cases he regards as "entirely rheumatic," and traces it as a frequent result of exposure to cold. Mr. Adams has not seen any cases accompanied with pain; but, upon the ground of deficient evidence, he doubts the rheumatic character of the affection under any circumstances, and regards it as probable that the children who, in restless nights, throw off the bed clothes, are frequently suffering from febrile or eccentric irritation. No evidence is given of alteration in the elementary structure of the muscles in the early stages; and Mr. Adams considers the myogenic theory to be advanced without sufficient evidence. M. Bouchut states that the development of the paralysis is usually slow. In the author's experience, it had always been sudden; and it is considered that, in the cases of supposed slow development, the consecutive phenomena—contraction and atrophy—had taken place. In these cases, the limb is often said to get weaker. When it occurs in the leg, the lameness increases, but this is due to the supervention of contraction, and not to any increase of the paralytic affection, which indeed is not infrequently improving. M. Bouchut observes, that "whether at the beginning or at the end of the myogenic paralysis, sensation remains quite perfect." In this the author entirely concurs. Mr. Adams has also noticed that there does not appear to be any disposition in the paralyzed muscles to become rigid, as in cases of adult paralysis recently noticed more particularly by Dr. Todd. The muscles either remain flaccid throughout life, or, by the spontaneous disappearance of the paralysis, they are restored to a healthy condition; or complete recovery is arrested, and the muscles remain partially paralyzed through life. This latter is believed to be the most frequent termination; the complete recovery second; and the persistent flaccid condition third, in relative frequency. The paralysis most commonly affects some of the muscles of one leg; very frequently the leg and arm of the same side; occasionally both legs; and very rarely both legs and both arms.

When single muscles are affected, the most frequent to suffer are—1, the extensor longus digitorum of the toes; 2, the tibialis anticus; 3, the deltoid; 4, the sterno-mastoid. When

particular groups of muscles are affected, the most frequent to suffer are—1, those on the anterior part of the leg, forming the extensors of the toes and flexors of the foot; 2, the extensors and supinators of the hand, always together; 3, the extensors of the leg, and with them generally the muscles of the foot in the first class. At the time of seizure, the author is unable to say whether any other muscles were affected; but if so, they completely recovered, as in the last stage the cases presented well marked examples of paralysis of single muscles or groups of muscles. Sir B. Brodie lately mentioned to the author a case brought to him, in which the muscles of deglutition were paralyzed in a child. The attempts to swallow were very painful to witness. He did not know the result, but death from starvation probably took place. In the Royal orthopædic hospital, where these cases apply in considerable numbers, no case had been seen in which the muscles of the hip joint were involved. Some patients, in whom both legs were affected, the rectus and other muscles of the thighs, as well as those of the legs being paralyzed, have never walked at all; but the existence of power in the muscles of the hip joints enables us to make these patients walk, by mechanically fixing the knee and ankle joints, with considerable freedom. This affection exhibits a strong tendency towards spontaneous cure. In some cases, the paralysis completely disappears, even when entire limbs are involved; but in reference to severe cases, Mr. Adams believes with Sir B. Brodie, that unless recovery takes place within a few months, the paralysis is generally persistent through life. In slight and moderately severe cases, the rule is, that either complete recovery or very great improvement takes place; and this frequently several years after the seizure.

Numerous cases are seen at the Orthopædic hospital in all stages of spontaneous recovery. The second stage is marked by deformity, produced by adapted atrophy of certain muscles, determined by paralysis of the opponent muscles and position of the part, as seen in the commonest form—elevation of the heel. The author advises the removal of the contraction in the lower extremities by division of the tendons, whenever it interferes with the motion of the joints necessary to progression and the erect position. Loss of power can be subsequently compensated for to a great extent by mechanical means, the joints being either rendered available in progression, or fixed. Infantile paralysis lays the foundation of a very large proportion of all the noncongenital deformities, itself being frequently only a transient condition. If the mode of production of these deformities were rightly under-

stood, their prevention would be easy. Passive muscular exercises, according to the circumstances of the case, and properly adapted mechanical supports, are the preventive measures indicated. In the medical treatment, gentle mercurials for a few months after the seizure are recommended, if not injurious to the general health, but, beyond this period, any internal remedies, except those calculated to improve the general health, are of little use. Febrile irritation must be allayed; and in difficult dentition the gums may be lanced. Although this cannot remove the mischief, it may contribute to this end, and diminish its effects. Mr. Adams has not seen benefit from blisters or other counterirritants, though he had used them. He prefers shampooing, galvanism, warm clothing, sea bathing, and passive exercises, as likely to aid the vigorous and frequently successful efforts made by nature. The hæmospastic apparatus invented by Dr. Junod was very useful in maintaining a natural temperature in the paralytic extremities. To some extent the apparatus had been useful in keeping a good supply of blood in the muscles, and preventing atrophy.—*Assoc. Med. Jour.*

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#### OPIMUM IN CONSTIPATION.

In the Glasgow Medical Society, (Feb. 20, 1855,) the following cases were reported, illustrative of the use of opium in constipation of the bowels:

Dr. Cowan mentioned the case of a man whom, after laboring for five days from obstinate constipation, resisting the strongest purgatives, he had been called to see. The patient was weak, complained of intense pain in the abdomen, and was in a very short time attacked with stercoraceous vomiting. He was seen by Dr. Lawrie when the pulse was extremely feeble. Brandy and opium were, at his suggestion, administered in large quantities. In the course of three days the patient had a natural evacuation, and soon became convalescent.

Dr. Adams had a case somewhat similar under his care. A man of an habitually constipated tendency took some opening medicine, which failed to operate. He was attacked in a day or two after by a hiccough, which had continued resisting every remedy, and he was now in an almost hopeless state.

Mr. Lyon had recently seen a case in which, after a fair trial of purgative enemata, which failed to produce an evacuation, he gave large doses of opium combined with calomel,

and opiate injections. After the lapse of five or six days free evacuations came away, but the patient sank and died. He alluded to the operation of gastrotomy, in which he apprehended the chief difficulty would lie in discovering the obstructed part. Notwithstanding this, however, if every other means of relief failed, he would consider it justifiable under favorable circumstances to operate.

Dr. Wilson had seen a case lately of obstruction, of seven days standing, in a child. There was very great, exhaustion, but no pain. Purgatives failed. A blister was applied, without relief; but after a dose of opium, followed by castor oil, a motion was obtained. In another case, purgatives and opium failing, air was injected with the most satisfactory results. In these cases he thought spasm the probable cause of the symptoms.

Dr. Bell had seen opium fail. He thought it was difficult to explain how it acted, and he could not believe that, in cases where there was no spasm or pain, it could do good. It probably acted by allaying irritation. He thought invagination more an effect than a cause of the disease, as the tube remained pervious, only narrowed in calibre.

*Glasgow Med. Jour.*

## THE VIRGINIA MEDICAL JOURNAL.

*The Stethoscope and Virginia Medical and Surgical Journal combined.*

We desire to inform the medical public, that an arrangement has been effected, by which the two medical journals of this state will be united on the 1st of January next; and we hope that the friends of both will all combine in giving a cordial support to **THE VIRGINIA MEDICAL JOURNAL**.

The editors and publishers of this periodical, earnestly desirous to build up a *home medical literature*, believe that this concentrated effort will gain the approbation of their friends, and enable them to render their work the exponent of the profession in Virginia. It is the offspring of private enterprise; it is unconnected with any local institution or association, and is designed to be the independent advocate of the rights and interests of the entire medical public.

**THE VIRGINIA MEDICAL JOURNAL** will be published on the first of every month in Richmond, and will be under the editorial management of Dr. McCaw of Richmond, and Dr. PEEBLES of Petersburg, who will have the valuable aid of Dr. OTIS as corresponding editor, and many other collaborators of ability and energy.

Each number will consist of not less than eighty-eight octavo pages, being one-third larger than the *Stethoscope*, and will be illustrated, whenever necessary, by lithographic and wood engravings. This increased size will enable the editors to present a complete monthly record of the improvements and discoveries in medicine, including original translations and selections from the foreign journals, whilst every effort will be made to encourage and induce our own profession to contribute regularly to the original department.

The terms of the work are *five dollars a year*, for which the subscriber receives *two volumes of eleven hundred pages*, containing a large amount of valuable and practical information on every branch of medical science. To all subscribers who pay *in advance*, or during the *first quarter* of the year, the "**JOURNAL**" will be sent *free of postage*.

Our large circulation throughout Virginia and the South renders this work a valuable *advertising medium*, and advertisements of a suitable character will be admitted at moderate prices.

All communications and books for review should be sent to the EDITORS.

Remittances, advertisements and business letters should be directed to the PUBLISHERS OF **THE VIRGINIA MEDICAL JOURNAL**, *Richmond, Va.*

RITCHIE & DUNNAVANT, *Publishers.*

### *To the Subscribers and Friends of the Stethoscope.*

It will be seen, by reference to our pages, that on the 1st of January next, the *Stethoscope* will be united with the *Virginia Medical and Surgical Journal*, and will hereafter appear in an enlarged form, as **THE VIRGINIA MEDICAL JOURNAL**.

Believing that such a work would greatly advance the interests of the profession of our state, we have, from the beginning, sustained the *Stethoscope* through all the difficulties and losses incident to the enterprise, and can now point with pride to the large list of subscribers who have rallied to the support of the *pioneer medical journal* of Virginia. The union we have now made will enable us, we hope, to bring the united talent and influence of the profession to our aid; and we appeal to the many friends of the *Stethoscope* to co-operate with us in the effort to make the **VIRGINIA MEDICAL JOURNAL** worthy of the name it bears, and the cause it is designed to support.

If any of our subscribers should desire to withdraw their names, they will please notify us before the 1st of January; and we also call attention to the fact, that to all who pay their subscriptions *before the 1st of April 1856*, the *Virginia Medical Journal* will be mailed free of postage.

RITCHIE & DUNNAVANT.

December 1855.

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## EXPLANATION OF PLATE I.

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FIGURE 1.—Preliminary stages of tubercle. From soft, gray, uninflamed lung bordering a yellow, unsoftened tubercle.

- a.* Epithelium scarcely altered.
- b.* Epithelium fatty.
- c.* Epithelium more fatty and enlarged.
- d.* Compound cells.

FIGURE 2.—Diagram of the stages of chronic tuberculization of the lungs:

- 1st. Air cell, with its epithelium healthy and adherent.
- 2d. Ditto, with epithelium fatty and enlarged, still adherent.
- 3d. Ditto, with fatty epithelium detached in places; compound tubercle cells upon walls of air vesicle in places; wall bared in places.
- 4th. Ditto, do. with exudation of tubercle blastema into air vesicle.
- 5th. Complete tubercle, bounded by irregular line of black pigment: consists of air vesicles and their septa filled and infiltrated with blastema, with compound tubercle cells and fatty epithelial cells as well as free tubercle nuclei and granules in the air vesicle, but only the free nuclei, granules and black pigment interstitially amongst the pulmonary fibres.

FIGURE 3.—Flakes of fatty epithelium from lung adjoining tubercle, showing the various sizes of epithelium cell when becoming fatty.

## EXPLANATION OF PLATE II.

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FIGURE 4.—Various forms of fatty epithelial cells, single and in flakes, as described in the text.

FIGURE 5.—Bronchial columnar epithelium, from lung adjoining yellow tubercle.

FIGURE 6.—The many nucleated tubercle cells :

*a.* A plump cell ; nuclei rather dim.

*b.* Another with one lateral nucleus, very distinct, and closely resembling a free tubercle corpuscle.

*c.* An aggregation of coherent nuclei, but no distinct parent cell wall around them.

*d.* A large cell, having a second cell enclosed with two nucleated nuclei, taken from a highly organized tubercle—the gray miliary, with fibrillated matrix.

*e.* The same cell at different foci.

*f.* An apparently compound shriveled cell.

*g.* A compound cell, partially disintegrated.

## EXPLANATION OF PLATE III.

---

FIGURE 7.—Three tubercles in an adhesion between lung and diaphragm—natural size:

- a. a.* Lung.
- b.* Tough, firm, pinkish, gelatious adhesion matter.
- c.* Fat.
- d.* Tubercle.
- e.* Diaphragm.

FIGURE 8.—Section through adhesion and fat wall into one of the tubercles:

- a.* Adhesion matter.
- b.* Adipose tissue.
- c.* Tubercle, containing fat globules, free tubercle nuclei, no compound cells, and but few granules.

FIGURE 9.—Free tubercle corpuscles:

- a. b. c.* Varieties of nucleated cell, as described in the text.
- d.* Nonnucleated nuclei.
- e.* Free molecules.

FIGURE 10.—Fibrillated matrix, containing nucleated and nonnucleated tubercle corpuscles, from gray miliary tubercle.

FIGURE 11.—Small blood vessel in the state of fatty degeneration, from large gray miliary tubercle, within which the walls of the air vesicles were still detectible.

## EXPLANATION OF PLATE IV.

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FIGURE 12.—Expectoration in phthisis:

1. Oral epithelium.
2. Filmy cells from tonsils.
3. 3. Bronchial epithelium—some fatty.
4. Mucous and pus cells.
5. Pigment cells.
6. Many nucleated tubercle cells.
7. Fatty epithelium from lungs.
8. 8. Filmy casts.
9. Free tubercle nuclei.
10. Red blood globules, enclosed in filmy envelopes.

Fig 1



Fig 3

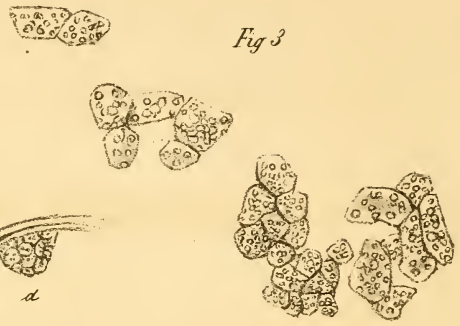


Fig 2





Fig. 4



Fig. 5



Fig. 6





Fig. 7

Plate III

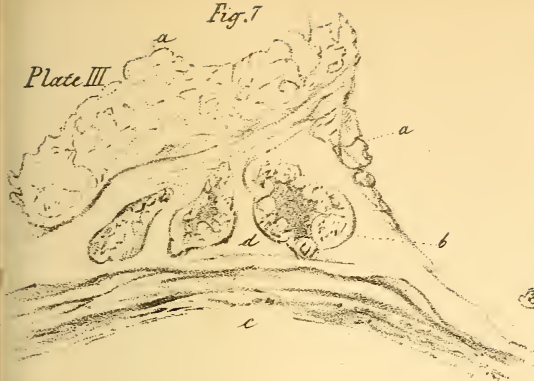


Fig. 9



Fig. 8

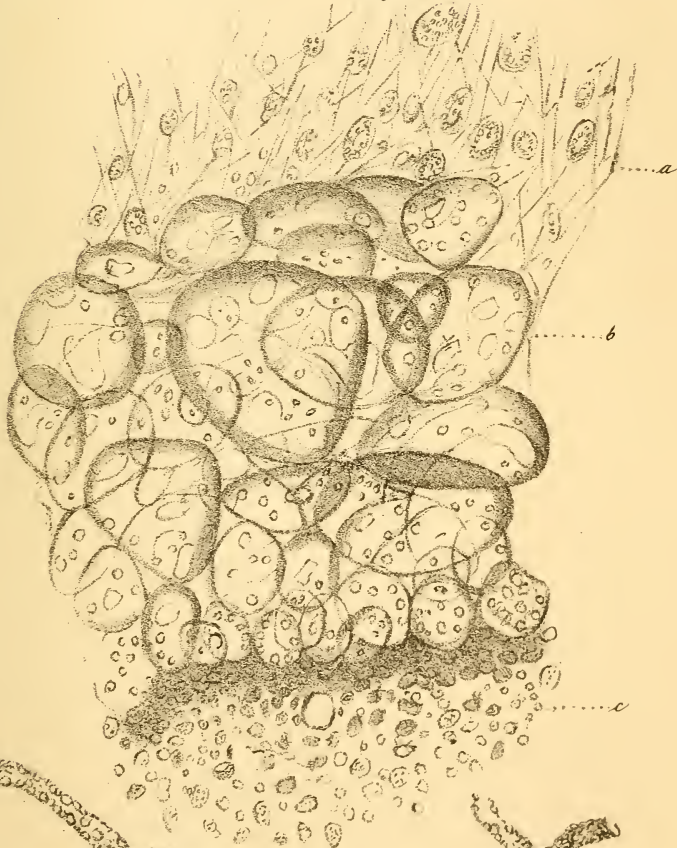


Fig. 10

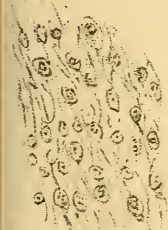


Fig. 11

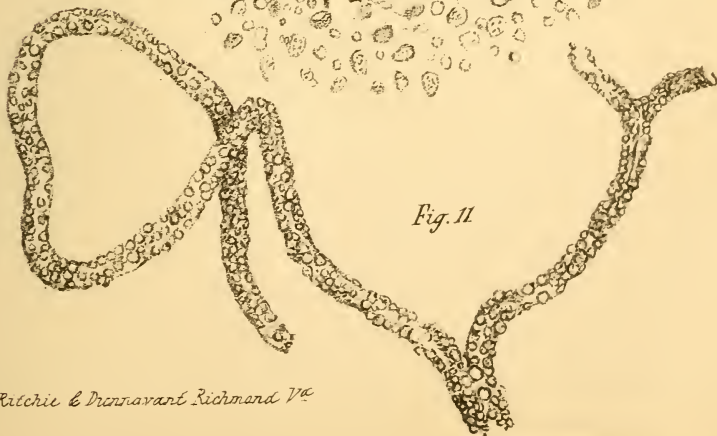




Fig. 12



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